

20020725.qrp v02\_n627.qrl.20020725

Date: Thu, 25 Jul 2002 19:03:11 EDT  
From: qrp-l@Lehigh.EDU  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: QRP-L digest 2627

QRP-L Digest 2627

Topics covered in this issue include:

- 1) [130586] Re: QRP paddle kit question?  
by "Michael Melland" <w9wis@charter.net>
- 2) [130587] matching  
by "edward guilford" <aa7hq@aa7hq.seanet.com>
- 3) [130588] RE: Conjugate Matching Demonstration  
by "Dave Richards" <wr3i@earthlink.net>
- 4) [130589] Re: Metric Time?  
by George F Franklin <w0av@juno.com>
- 5) [130590] RE: Metric Time?  
by "Dave Richards" <wr3i@earthlink.net>
- 6) [130591] RE: Metric Time? What's Next?  
by Karl Kanalz <kkanalz@gcecispc.com>
- 7) [130592] FS: Ten Tec Model 254 antenna tuner  
by "NZ8J" <timcook@erinet.com>
- 8) [130593] Re: Metric Time? What's Next?  
by "Trevor Jacobs" <kg6cyn@earthlink.net>
- 9) [130594] Final FoX Log K0FRP  
by "Al Dawkins" <alk0frp@attbi.com>
- 10) [130595] Re: Metric Time? What's Next? Fox Frequency.  
by Arthur Moe <kb7ww@easystreet.com>
- 11) [130596] RE: Conjugate Matching Demonstration  
by W2AGN <w2agn@w2agn.net>
- 12) [130597] QRP broadcasting & them 1.75 km loonies again  
by Nils R Young <nilsbull@juno.com>
- 13) [130598] More about ol' Bill Kreis & the USN radio school . . .  
by Nils R Young <nilsbull@juno.com>
- 14) [130599] OT-data for BA1360 and AN7226 ICs  
by David Shalita <davidr@cnmnetwork.com>
- 15) [130600] Anyone need these? T37-26  
by "Trevor Jacobs" <kg6cyn@earthlink.net>
- 16) [130601] NEQRP CW Net, Thursday, 24 July 02, 08:30 PM EDT, 3.565MHz  
by Chuck Ludinsky <cludinsky@attbi.com>
- 17) [130602] Re: Metric Time?  
by Thom LaCosta <baltimoremd@baltimoremd.com>
- 18) [130603] Re: Metric Time?  
by Ray Sills <raysills@1stconnect.com>
- 19) [130604] Re: SST-15?

by wkhibbert@juno.com

20) [130605] Re: The tuner character, WHEN ADJUSTED  
by "Karl F. Larsen" <k5di@zianet.com>

21) [130606] Re: FOX Goodie  
by "Karl F. Larsen" <k5di@zianet.com>

22) [130607] RE: Suggest a core ?  
by Howard Rubin <hrubin1970@comcast.net>

23) [130608] MP+ PLL PCB kit  
by "w8diz" <w8diz@fpqrp.com>

24) [130609] RE: Conjugate Matching Demonstration  
by "Karl F. Larsen" <k5di@zianet.com>

25) [130610] Re: Another View of Conjugate Matching - without the math! (long)  
by "Karl F. Larsen" <k5di@zianet.com>

26) [130611] Re: matching  
by "Karl F. Larsen" <k5di@zianet.com>

27) [130612] 1k60 diode  
by "Stuart Rohre" <rohre@arlut.utexas.edu>

28) [130613] Ground plane for amp  
by "TC Dufresne" <tdufresne@neb.rr.com>

29) [130614] The Antenna and Low Power, (QRP) Forum of Austin ham convention Aug.  
3 Program  
by "Stuart Rohre" <rohre@arlut.utexas.edu>

30) [130615] Re: Anyone need these? T37-26  
by "Trevor Jacobs" <kg6cyn@earthlink.net>

31) [130616] Re: 1k60 diode  
by "Brad Hernlem" <alihernlem@hotmail.com>

32) [130617] Re: Ground plane for amp  
by "Leon Heller" <leon\_heller@hotmail.com>

33) [130618] Re: The Antenna and Low Power, (QRP) Forum of Austin ham convention  
Aug. 3 Pr...  
by K5BDZ@aol.com

34) [130619] RE: 1k60 diode & RS 1N34s  
by Nick Kennedy <nkennedy@tcainternet.com>

35) [130620] RE: Ground plane for amp  
by Nick Kennedy <nkennedy@tcainternet.com>

36) [130621] Re: MFJ Model 401C Econo Keyer II  
by "John Dorson" <jdorson@worldshare.net>

37) [130622] RE: Metric Time? Metric Weekends  
by Karl Kanalz <kkanalz@gcecispc.com>

38) [130623] Re: A little story...or QRP fun! (fwd)  
by David Hinerman <WD8CIV@worldnet.att.net>

39) [130624] RE: Metric Time?  
by "Charles Mabbott" <aa8vs@msn.com>

40) [130625] Re: Feedline Test  
by Bill Coleman <aa4lr@arrl.net>

41) [130626] Re: [fpqrp] MP+ PLL PCB kit  
by Lloyd Lachow <llachow@yahoo.com>

42) [130627] UPDATED Re: The " Rock-Mite" Files

by "Rod N0RC" <rod@n0rc.us>

43) [130628] RE: Conjugate Matching Demonstration  
by Bill Coleman <aa4lr@arrl.net>

44) [130629] Re: The Answer  
by Bill Coleman <aa4lr@arrl.net>

45) [130630] Re: Short Dipole w/Dave Benson's Noise Generator  
by Bill Coleman <aa4lr@arrl.net>

46) [130631] Re: Tuner measurements  
by Bill Coleman <aa4lr@arrl.net>

47) [130632] Re: Tuner related losses are h u g e - some OM prefer a moderate  
SWR  
by Bill Coleman <aa4lr@arrl.net>

48) [130633] Confessions of a Rookie builder...  
by "Mullin, Edward J." <mulline@tycoelectronics.com>

49) [130634] Re: Vertical Confusion  
by Bill Coleman <aa4lr@arrl.net>

50) [130635] 12v Battery Monitor circuit  
by "Paul G Kaczmarek" <Paul.G.Kaczmarek@usa.dupont.com>

51) [130636] OT - Electrical House Wiring Question - Long  
by Majority Mike Capt 609 CPS/DOXE <mike.majority@shaw.af.mil>

52) [130637] RE: Tuner related losses are h u g e - some OM prefer a moderate  
SWR  
by "Alverson, Tom" <TomA@xetron.com>

53) [130638] Re: Confessions of a Rookie builder...  
by "Charles Mabbott" <aa8vs@msn.com>

54) [130639] (88' doublet) RE: Conjugate Matching Demonstration  
by Steven Weber <kd1jv@moose.ncia.net>

55) [130640] RE: Ground plane for amp  
by "Tracy Markham" <tracy@bytemark.com>

56) [130641] Re: 12v Battery Monitor circuit  
by "w8diz" <w8diz@fpqrp.com>

57) [130642] Re: Confessions of a Rookie builder...  
by "Lee Mairs" <lmairs@cox.net>

58) [130643] Re: 12v Battery Monitor circuit  
by "Joe Roof" <jroof@mindspring.com>

59) [130644] ARS BB#66 Ready  
by Bob <ad4mz@yahoo.com>

60) [130645] RE: (88' doublet) RE: Conjugate Matching Demonstration  
by "Mullin, Edward J." <mulline@tycoelectronics.com>

61) [130646] 2SC1969 TRANSISTORS  
by "Donald Dorn" <DDORN@cwis.net>

62) [130647] Re: Ground plane for amp  
by "Bob Tellefsen" <n6wg@earthlink.net>

63) [130648] Re: 12v Battery Monitor circuit  
by Steven Weber <kd1jv@moose.ncia.net>

64) [130649] Re: Confessions of a Rookie builder...  
by na5n@zianet.com

65) [130650] QRP HomeBuilder web site

- by "Bob Tellefsen" <n6wg@earthlink.net>
- 66) [130651] RE: 2SC1969 TRANSISTORS  
by Conrad Weiss <radman@best.com>
- 67) [130652] Re: 2SC1969 TRANSISTORS  
by "John J. McDonough" <wb8rcr@arrl.net>
- 68) [130653] Re: Confessions of a Rookie builder...  
by "Lee Mairs" <lmairs@cox.net>
- 69) [130654] CQ East Coast again!  
by "Juanjo Pastor" <ec5aca@wanadoo.es>
- 70) [130655] can't find  
by Bruce Rattray <rattray@gpfn.sk.ca>
- 71) [130656] RE: Confessions of a Rookie builder...  
by "Mullin, Edward J." <mulline@tycoelectronics.com>
- 72) [130657] Ten Tec 208 CW Filter  
by Marv Fagenson <k6hcj@juno.com>
- 73) [130658] RE: can't find (QRP Dupe... found)  
by Conrad Weiss <radman@best.com>
- 74) [130659] Re: Metric Time? What's Next?  
by David Hinerman <WD8CIV@worldnet.att.net>
- 75) [130660] RE: 12v Battery Monitor circuit  
by Conrad Weiss <radman@best.com>
- 76) [130661] Re: 12v Battery Monitor circuit  
by Jeff Dairiki <dairiki@dairiki.org>
- 77) [130662] RE: 12v Battery Monitor circuit  
by tf3vst@vortex.is (Villi Idunni)
- 78) [130663] Re: CQ East Coast again!  
by Thom LaCosta <baltimoremd@baltimoremd.com>
- 79) [130664] Re: 2SC1969 TRANSISTORS  
by "Donald Dorn" <DDORN@cwis.net>
- 80) [130665] Re: OT - Electrical House Wiring Question - Long  
by "Mike Yetsko" <myetsko@insydesw.com>
- 81) [130666] Austin QRP Convention Fri. Aug. 2 Dinner and Door Prize gathering  
by "Stuart Rohre" <rohre@arlut.utexas.edu>
- 82) [130667] Re: OT - Electrical House Wiring Question - Long  
by ken cubilo electric <kce@chartermi.net>
- 83) [130668] Tuesday Night 7/23/02 Report de K7Q0/QRPP  
by Chuck Adams <k7qo@earthlink.net>
- 84) [130669] RE: 88' wire - Conjugate Matching Demonstration  
by Dave Hottell <hottell@gulftel.com>
- 85) [130670] Re: (88' doublet) RE: Conjugate Matching Demonstration  
by Bill Coleman <aa4lr@arrl.net>
- 86) [130671] Re: 12v Battery Monitor circuit  
by Steven Weber <kd1jv@moose.ncia.net>
- 87) [130672] Advice on Operating from Jamaica  
by rsstone@juno.com
- 88) [130673] RE: 12v Battery Monitor circuit  
by Conrad Weiss <radman@best.com>
- 89) [130674] Re: 12v Battery Monitor circuit

- by "Bill Jones" <kd7s@psnw.com>
- 90) [130675] Operating QRP on WV/VA line  
by Daryl WB4YEX <darylcline@ntelos.net>
- 91) [130676] RE: 12v Battery Monitor circuit  
by Conrad Weiss <radman@best.com>
- 92) [130677] C21 FS  
by "johngabbard" <johngabbard@usintouch.com>
- 93) [130678] Re: 2SC1969 TRANSISTORS  
by David Hinerman <WD8CIV@worldnet.att.net>
- 94) [130679] Re: Ground plane for amp  
by David Hinerman <WD8CIV@worldnet.att.net>
- 95) [130680] RE: Metric Time?  
by David Hinerman <WD8CIV@worldnet.att.net>
- 96) [130681] Re: Confessions of a Rookie builder...  
by Don <dwitttlic@apci.net>
- 97) [130682] RE: 12v Battery Monitor circuit  
by Steven Weber <kd1jv@moose.ncia.net>
- 98) [130683] Re: 12v Battery Monitor circuit  
by Steven Weber <kd1jv@moose.ncia.net>

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Date: Wed, 24 Jul 2002 18:02:18 -0500  
From: "Michael Melland" <w9wis@charter.net>  
To: <RDavis24@carolina.rr.com>,  
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130586] Re: QRP paddle kit question?  
Message-ID: <008401c23366\$2920ee60\$3f20be42@computer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I suspect that's the "Poor Man's Paddle" that appeared in the July 1999 QST on page 53. The author was our own Denny Payton, N9JXY.

It uses an Altoids tin and pc board with two micro switches. I have built three .... gave 2 away as gifts and use the other in the field along with my Tee-Nee Key.

They work great !

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Date: Wed, 24 Jul 2002 16:09:02 -0700  
From: "edward guilford" <aa7hq@aa7hq.seanet.com>  
To: <qrp-1@lehigh.edu>  
Subject: [130587] matching  
Message-ID: <000501c23367\$252c3f20\$644cb6cc@computer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

those interested in antenna matching may find the material in Terman's Radio Engineering Handbook(1943) of great interest. Perhaps the biggest advance since then is the Smith chart. Those who have troubled themselves to master this find the topic very useful and straightforward. Those who believe that this subject can be treated with words only, no arithmetic, are probably doomed to thrash about forever.

73 de ed, aa7hq

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Date: Wed, 24 Jul 2002 19:22:42 -0400  
From: "Dave Richards" <wr3i@earthlink.net>  
To: <k5di@zianet.com>,  
        "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130588] RE: Conjugate Matching Demonstration  
Message-ID: <FAEEKPCBNNDNKMGPIBKCEPCCEAA.wr3i@earthlink.net>

Karl,  
    When you say your 88ft antenna works well. Compared to what?  
Dave  
WR3I

-----Original Message-----  
From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of Karl F. Larsen  
Sent: Wednesday, July 24, 2002 11:26 AM  
To: Low Power Amateur Radio Discussion  
Subject: Conjugate Matching Demonstration

Yesterday I reported on a test I conducted. In this message I will use numbers that are easier to use and in clear language explain what happened.

The short result is that I had a transmitter making 10 watts and a load that was 19 ohms in series with 910 pf, and a Tee type tuner. With the load attached direct to the tuner I got 4 watts into the resistor.

When I put 200 feet of coax on the output of the tuner and the load at the other end, I got 6 watts of power into the resistor.

Since the coax has 0.7 DB of loss, the whole 10 watts were not available at the load. But the test proves the feed line can INCREASE the power into the load (antenna).

Whether this is conjugate matching I can't say. But I can say that something makes my 88 foot long 80 meter dipole work well and I demonstrated it.

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

-----  
Date: Wed, 24 Jul 2002 18:45:20 -0500  
From: George F Franklin <w0av@juno.com>  
To: mark@buttery.org  
Cc: qrp-l@lehigh.edu  
Subject: [130589] Re: Metric Time?  
Message-ID: <20020724.184618.-215923.0.w0av@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi Gents,

What's next?

The metric hammer  
or the metric pliers?

Sorry!

de George/W0AV  
Etc., etc.

-----  
Date: Wed, 24 Jul 2002 19:59:47 -0400  
From: "Dave Richards" <wr3i@earthlink.net>  
To: <w0av@juno.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130590] RE: Metric Time?  
Message-ID: <FAEEKPCBNNDNKGMPIBKAEPDCEAA.wr3i@earthlink.net>

George,

Well I do know that in order to convert pliers to Metric you first have to use

Multi-Pliers!

Dave WR3I

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of George F Franklin  
Sent: Wednesday, July 24, 2002 7:45 PM  
To: Low Power Amateur Radio Discussion  
Subject: Re: Metric Time?

Hi Gents,

What's next?

The metric hammer  
or the metric pliers?

Sorry!

de George/W0AV  
Etc., etc.

-----  
Date: Wed, 24 Jul 2002 19:18:03 -0500  
From: Karl Kanalz <kkanalz@gcecisp.com>  
To: "'w0av@juno.com'" <w0av@juno.com>,  
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130591] RE: Metric Time? What's Next?  
Message-ID: <01C23347.09235400@KKANALZ>

Gosh, George.... Haven't you heard about "Metric Weekends" ?



Karl K - W8TIF  
McKinney, Texas

-----Original Message-----

From: George F Franklin [SMTP:w0av@juno.com]  
Sent: Wednesday, July 24, 2002 6:45 PM  
To: Low Power Amateur Radio Discussion  
Subject: Re: Metric Time?

Hi Gents,

What's next?

The metric hammer  
or the metric pliers?

Sorry!

de George/W0AV  
Etc., etc.

-----  
Date: Wed, 24 Jul 2002 20:18:25 -0400  
From: "NZ8J" <timcook@erinet.com>  
To: <qrp-l@lehigh.edu>  
Subject: [130592] FS: Ten Tec Model 254 antenna tuner  
Message-ID: <006601c23370\$cb8770c0\$6122fea9@erinet.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

Works great and looks good with one exception, someone put a small =  
on/off toggle switch just to the right of the meter to turn off the =  
meter light. Has some scratches on the case, nothing bad, the face is =  
fine. Very nice tuner with antenna switching and built in 4:1 balun =  
200/20 watt power scales and SWR meter.  
\$85 shipped priority mail in the lower 48  
Thanks=20  
Tim  
NZ8J

-----  
Date: Wed, 24 Jul 2002 17:26:33 -0700

From: "Trevor Jacobs" <kg6cyn@earthlink.net>  
To: <kkanalz@gcecispc.com>,  
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130593] Re: Metric Time? What's Next?  
Message-ID: <00fb01c23371\$ee3580c0\$fa93b2d1@tjacobs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Karl, are they shorter than the "Standard Weekend" ? ;-)

73's Trev KG6CYN  
<http://home.earthlink.net/~kg6cyn>  
<http://www.qsl.net/kg6cyn>

----- Original Message -----  
From: Karl Kanalz <kkanalz@gcecispc.com>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Sent: Wednesday, July 24, 2002 5:18 PM  
Subject: RE: Metric Time? What's Next?

> Gosh, George.... Haven't you heard about "Metric Weekends" ?

>

> Karl K - W8TIF

> McKinney, Texas

>

> -----Original Message-----

> From: George F Franklin [SMTP:w0av@juno.com]

> Sent: Wednesday, July 24, 2002 6:45 PM

> To: Low Power Amateur Radio Discussion

> Subject: Re: Metric Time?

>

> Hi Gents,

>

> What's next?

>

> The metric hammer

> or the metric pliers?

>

> Sorry!

>

> de George/W0AV

> Etc., etc.

>

-----  
Date: Wed, 24 Jul 2002 18:30:06 -0600  
From: "Al Dawkins" <alk0frp@attbi.com>  
To: <QRP-L@lehigh.edu>  
Subject: [130594] Final FoX Log K0FRP  
Message-ID: <004101c23372\$6d05cc20\$0500a8c0@homev3v5yzk21f>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Fox Log K0FRP July 18 2002

2001	N5ZE	579	TX	LEW	5W
2002	K3PH	579	PA	BOB	5W
2002	N1FN	599	CO	ET	5W
2002	K3IU	559	KEN	RI	5W
2004	K5DW	559	DON	TX	5W
2005	WA9TZE	579	WI	JIM	5W
2006	W9XU	559	WI	LON	5W
2006	K8CV	559	MI	WALT	5W
2007	N4ROA	579	VA	DAN	5W
2008	N9IJ	589	IL	LEN	5W
2008	AA50	579	LA	VERN	5W
2009	NK6A	559	CA	DON	5W
2009	KJ0C	599	MO	JIM	5W
2010	K4GT	559	GA	JIM	5W
2010	NK9G	559	WI	RICK	5W

2011	AA4LR	579	GA	BILL	5W
2012	KB7WW	599	OR	ART	5W
2012	N9NE	599	WI	TOM	100mW
2013	K8HJ	559	MI	JOHN	4W
2014	VE6EX	559	AB	DAN	5W
2015	WE9K	559	WI	GLEN	5W
2015	K4FB	579	FL	PAUL	5W
2016	VE4WI	559	MB	CRAIG5W	
2017	K4MF	579	FL	GARY	5W
2017	W5USJ	559	TX	CHUCK5W	
2018	WB8RCR	599	MI	JOHN	3W
2019	K5TR	579	TX	GEO	1W
2019	K4TJD	599	GA	TOM	5W
2019	W9HL	559	IL	RANDY5W	
2021	K9IUA	599	IA	KEVIN5W	
2021	VE3FAL	599	ON	FRED	5W
2022	KB9YIG	559	IN	TONY	500MW
2023	K3ESE	599	MD	FLOYD5W	
2024	AB9CA	559	AL	DAVE	5W
2025	W0CH	579	MO	DAVE	5W
2025	N4DD	559	TN	DENNIS5W	
2027	KG4FSN	559	FL	JUAN	5W
2027	N3XRV	579	PA	CHRIS	5W
2027	K9UT	559	IN	JERRY5W	

2028	N0IT	599	MO	Dave	5w
2029	VA6RF	559	AB	EARL	5W
2030	N1WPU	549	ME	TED	5W
2031	K0DQ	579	IN	SCOTT5W	
2032	K5E0A	559	LA	WAYNE5W	
2032	K5LN	559	TX	BILL	5W
2033	N5IB	579	LA	JIM	5W
2034	K9DC	559	IN	DAVE	5W
2034	AJ4AY	579	AR	JAY	5W
2035	KG4CHX	599	NC	TIM	5W
2036	N7BVY	599	OR	STEVE5W	
2038	KI0RB	599	CO	VINCE5W	
2038	KC6CYN	559	CA	TREV	5W
2039	W9AYG	579	WI	FRED	5W
2041	KF4FPP	559	GA	CHUCK5W	
2041	N0UR	579	MN	JIM	5W
2042	N0HRL	559	MN	KEN	5W
2042	KZ5J	599	TX	PAT	5W
2044	KC1FB	559	CT	JIM	1W
2046	VE5RC/W7	559	MT	BRUCE5W	
2051	AG0T	559	ND	TODD	4W
2056	W5YR	579	TX	GEORGE5W	
2056	KV2X	579	NY	TOM	5w
2058	K8DD	559	MI	HANK	5W

2103	KI0II	559	CO	RON	1W
2109	K5SR	559	TX	DAVE	5W
2109	K5JHP	559	TX	BILL	5W
2110	W5TB	559	TX	DOC	5W
2119	NM5M	579	TX	ERIC	5W
2126	N3BJ	579	VA	ALAN	5W
2131	WA8BXN	559	OH	MIKE	5W dupe
2133	N7BVY	579	WA	STEVE	5W
2141	W3KC	579	MD	CHAS	1W
2142	AD6JV	559	CA	BILL	5W
2142	AK7D	579	OR	FRED	5W
2153	N9WW/1	559	ME	JIM	5W

N5ZE was on my laptop as my first Q but when the logging prog locked I had to paper log and forgot the q

With the dupe all is still the same.

Hot and heavy first 30 min 41 q's

2nd 30 min 21 q's

3rd 30 min 06 q's

4th 20 min 06 q's

A1 K0FRP

Aurora Colorado

-----  
Date: Thu, 25 Jul 2002 00:34:16 +0000  
From: Arthur Moe <kb7ww@easystreet.com>  
To: kkanalz@gcecispc.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130595] Re: Metric Time? What's Next? Fox Frequency.  
Message-ID: <3D3F4788.107C459F@easystreet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

One of tomorrow nights foxes will be found just above  
357.1494 "M" Mhz "Metric"

Art

Karl Kanalz wrote:

>  
> Gosh, George.... Haven't you heard about "Metric Weekends" ?  
>  
> Karl K - W8TIF  
> McKinney, Texas  
>  
> -----Original Message-----  
> From: George F Franklin [SMTP:w0av@juno.com]  
> Sent: Wednesday, July 24, 2002 6:45 PM  
> To: Low Power Amateur Radio Discussion  
> Subject: Re: Metric Time?  
>  
> Hi Gents,  
>  
> What's next?  
>  
> The metric hammer  
> or the metric pliers?  
>  
> Sorry!  
>  
> de George/W0AV  
> Etc., etc.

-----  
Date: Wed, 24 Jul 2002 20:35:30 -0400  
From: W2AGN <w2agn@w2agn.net>  
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130596] RE: Conjugate Matching Demonstration  
Message-ID: <3D3F0F92.16964.1FB88552@localhost>  
MIME-version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT  
Content-description: Mail message body

On 24 Jul 2002 at 19:22, Dave Richards wrote:

> Karl,  
> When you say your 88ft antenna works well. Compared to what?  
> Dave  
> WR3I

Compared to his EH antenna.

--

/ \ / \ / \ / \ / \ John L. Sielke  
( W )( 2 )( A )( G )( N ) <http://www.w2agn.net>  
\\_ / \\_ / \\_ / \\_ / \\_ / ARCI, NJQRP, ARQrp, GQRP, RSGB  
Ex- K3HLU, W7JEF, W4MPC, N4JS

-----  
Date: Wed, 24 Jul 2002 20:39:46 -0400  
From: Nils R Young <nilsbull@juno.com>  
To: QRP-L@lehigh.edu  
Subject: [130597] QRP broadcasting & them 1.75 km loonies again  
Message-ID: <20020724.205100.-221.3.nilsbull@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Gang,

I think they're putting something in my food. I keep getting all these ideas. Like today one of the guys in the TV center (N8DRM) came down from their hide-out to tell me about some "all advertising" QRP broadcasting station on 1610 kHz. I got home & dagnab if Dave weren't right. They are there. And I can hear 'em.



This wouldn't be bad enough if I hadn't been looking over some stuff that I thought I'd lost -- along with a copy of Elmer Bucher's book "Practical Wireless Telegraphy" (two copies, the 1917 edition having been owned by and wrote in by William J. Kreis, 6th Co., Second Squad, US Naval Radio School, Harvard University [sure wish he'd put a date in it so I could tell when he was turned into a sparks . . . back when there was real sparks]) & I got started thinking about 1.75 km/136 kHz/Part 15 stuff again.

Yeah, yeah, I know. I still ain't got around to tryin' out my "repairs" to my Z-match tuner thingie & it ain't like I ain't got enough trouble to get in the way it is, what with tryin' to arrange a guy to come give me an estimate on the long-overdue garage door replacement. And I gotta get the 1.75 km bug again.

One web site (ELRAD or ELFRAD, I think it were) had news of what some think is the first time recording of a gravity wave that coincides with a rather spectacular prominence that's supposed to jimmy up the airwaves this week . . . like today even. Registered a wave at something like .16 Hz. Which is so close to all them car batteries I hear when I tune down to 0 Hz.

At which point I must ask ('cause I didn't document what I did): Does anyone have a schemo for the 1.75 km to 10 MHz converter that 624 Kits used to sell?

I've got all the rest of summer to figure out how the VLF/ULF ATU I built (receiver only) works. And build more stuff I don't need to clutter up some more space around here.

Nice thing about VLF &c is the coils & stuff is large enough (generally) for me to trip over. So I won't be losin' 'em on the desk . . . for a while at least.

73

Nils

. . . another VLF research web site (Stanfords got one too) had neat pictures of the spectrographs of those whooshes we hear just as the bands go deader 'n a three-week-old squarshed possum like what appears in front of my house now and oncet . . . interesting to see just what that whoosh looks like as it walks from 10 Hz up through everything that bounces off the ionosphere . . . until the whoosh is done, that is.

-----  
Nils R. Bull Young -- W8IJN -- La Estancia de los Guajolotes Sonrientes  
<http://w8ijn.tripod.com> -- <http://members.fortunecity.com/nilsbull>  
"The island is closer than your memories are." -- Ian G. Bull Young, 15

Feb 2002

-----  
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-----  
Date: Wed, 24 Jul 2002 20:49:01 -0400

From: Nils R Young <nilsbull@juno.com>

To: QRP-L@lehigh.edu

Subject: [130598] More about ol' Bill Kreis & the USN radio school . . .

Message-ID: <20020724.205100.-221.4.nilsbull@juno.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Gang,

I just discovered in the back of this book (Elmer Bucher's "Practical Wireless Telegraphy," 1917) that ol' Bill Kreis, who put his name & other notes on the front end paper, also put something on the back endpaper.

It says: "William J. Kreis, 627, US Naval radio School, Cambridge, Mass." And then in a box below that: "Home: Allentown Pennsylvania, Lehigh County." (There are some other scribbles, numbers like 403, 678, and "18 n. Four" Wonder what them means.)

Here's the kick: My father served in the US Army, 614th Army Ordnance Company, on Guadalcanal & Bougainville. Most of the other guys in the outfit were from Pennsylvania. Sarge joined up somewhere along the line, ended up with those guys. For many years -- and as far as I know there's only one guy left -- they all would meet in Allentown for a yearly reunion.

More coincidences. Wonder if ol' Bill ever got a ham ticket.

Dad never did. But before Arizona became a state, he and his brother, Nils, would play radio with home made crystal sets & spark gaps made out of cast-off junk. They'd run a wire between the outhouse & the cornice of the roof of their home in Camp Verde, AZ. Their father took it down 'cause the wind made it hum and resonate in the outhouse, a place that Grampa Tom said should be visited only by silence.

Which is quite majestic, for them of youse what's been out there.

73

Nils

-----  
Nils R. Bull Young -- W8IJN -- La Estancia de los Guajolotes Sonrientes  
http://w8ijn.tripod.com -- http://members.fortunecity.com/nilsbull  
"The island is closer than your memories are." -- Ian G. Bull Young, 15  
Feb 2002

-----  
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http://dl.www.juno.com/get/web/.

-----  
Date: Wed, 24 Jul 2002 18:06:54 -0700  
From: David Shalita <davidr@cnmnetwork.com>  
To: "qrp-1 \\"Low Power Amateur Radio Discussion\\"<qrp-1@lehigh.edu>  
Subject: [130599] OT-data for BA1360 and AN7226 ICs  
Message-ID: <3D3F4F2E.30E3C611@cnmnetwork.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Hi,

A friend needs data sheets, pin out info, etc for BA1360 and AN7226  
ICs.

We cannot find on Internet. All we find are possible sources.

Both parts are used in AM FM battery portable he is trying to repair.

Thank you for any pointers to data sheets.

73, W6MIK, Dave

-----  
Date: Wed, 24 Jul 2002 18:24:07 -0700  
From: "Trevor Jacobs" <kg6cyn@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130600] Anyone need these? T37-26  
Message-ID: <018901c23379\$f96fac60\$fa93b2d1@tjacobs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hi Gang,

Amidon sent me 28 pieces of T37-26 toroids by accident. I had ordered the T37 with the 6 mix. They sent me the correct ones right away, and don't want these back? Anyone need them? I don't even have the technical information on the 26 mix. Let me know...

73's Trev KG6CYN

<http://home.earthlink.net/~kg6cyn>

<http://www.qsl.net/kg6cyn>

-----  
Date: Wed, 24 Jul 2002 21:35:48 -0400  
From: Chuck Ludinsky <cludinsky@attbi.com>  
To: qrp-1@lehigh.edu  
Subject: [130601] NEQRP CW Net, Thursday, 24 July 02, 08:30 PM EDT, 3.565MHz  
Message-ID: <3D3F55F4.3050305@attbi.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii; format=flowed  
Content-Transfer-Encoding: 7bit

The New England QRP Club's 80M CW net, WQ1RP, will meet again on Thursday, 25 July 2002, at 8:30 PM EDT (00:30Z, 26 Jul 02) on or near 3.565 MHz. All hams are welcome. Net control operator will be Chuck, K1CL, operating from Chelmsford, MA.

We're enjoying a spell of cool weather and clear conditions in the Northeast. This should give us a break from the static and QRN that we've had throughout the summer. So please stop by and say hello to everyone on the net.

72 DE K1CL,  
Chuck

-----  
Date: Wed, 24 Jul 2002 21:50:19 -0400 (EDT)  
From: Thom LaCosta <baltimoremd@baltimoremd.com>  
To: George F Franklin <w0av@juno.com>  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [130602] Re: Metric Time?

Message-ID: <20020724214947.Q78677-1000000@unix1.vhost.min.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 24 Jul 2002, George F Franklin wrote:

> What's next?

Metric Viagra?

thom

baltimoremd@baltimoremd.com	Thom LaCosta K3HRN Webmaster
<a href="http://www.baltimoremd.com/">http://www.baltimoremd.com/</a>	Baltimore's Home Page
<a href="http://www.baltimorehon.com/">http://www.baltimorehon.com/</a>	Home of the Baltimore Lexicon
<a href="http://www.zerobeat.net">http://www.zerobeat.net</a>	Home of The QRP Web Ring and Drake Mail List Pages

-----  
Date: Wed, 24 Jul 2002 22:09:51 -0400  
From: Ray Sills <raysills@1stconnect.com>  
To: QRP list <qrp-l@lehigh.edu>  
Subject: [130603] Re: Metric Time?  
Message-ID: <B964D455.12690%raysills@1stConnect.com>  
Mime-version: 1.0  
Content-type: text/plain; charset="US-ASCII"  
Content-transfer-encoding: 7bit

Metric time? Sure... old hat, sorta. The proposal was to make a regular day be divided into 1000 "chrons".. the unit of metric time. People would work at their jobs 333 chrons. Each chron would be divided into decichrons or millichrons, depending the the accuracy needed to measure time in daily activities.

It would work for me.

73 de Ray  
K2ULR  
FN20t1

> From: "Steve Lawrence" <Steve.Lawrence@itwfeg.com>  
> Reply-To: Steve.Lawrence@itwfeg.com  
> Date: Wed, 24 Jul 2002 14:56:55 -0400  
> To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

> Subject: RE: Metric Time?  
>  
> I'm not sure about "metric" time, but I recently read about another  
> interesting attempt by the Swiss company, Swatch, to create a new time  
> standard called "Internet Time". Based on 1,000 "beats" a day each unit  
> of time is about 1 minute, 26 seconds. More can be found of this goofy  
> idea at...  
>  
> [http://www.swatch.com/itime\\_tools/itime.php?color=black&textcolor=white](http://www.swatch.com/itime_tools/itime.php?color=black&textcolor=white)  
>  
> Apparently, they sell some watches that keep this time!@#@!  
>  
> Steve  
> aa8af  
>  
>  
>  
>  
> Karl Kanalz <kkanalz@gcecisp.com>  
> Sent by: owner-qrp-1@Lehigh.EDU  
> 07/24/2002 02:26 PM  
> Please respond to kkanalz  
>  
>  
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
> cc:  
> Subject: RE: Metric Time?  
>  
>  
> Oh no, Bruce! Don't tell me that they've gone and "metricized" \*time\*  
> now!  
>  
> You wrote:  
>  
> -----Original Message-----  
> From: Bruce Rattray [SMTP:rattray@gpfn.sk.ca]  
> Sent: Wednesday, July 24, 2002 10:05 AM  
> To: Low Power Amateur Radio Discussion  
> Subject: Re: A little story...or QRP fun!  
>  
> <snip>  
> ..Bonnie and I have a small conversion slider chart for converting from  
> metric to Imperial for cooking times, liquids, etc...<snip>  
>  
>  
>  
>

-----  
Date: Wed, 24 Jul 2002 22:22:02 -0400  
From: wkhibbert@juno.com  
To: qrp-1@lehigh.edu  
Subject: [130604] Re: SST-15?  
Message-ID: <20020724.222204.-565805.1.wkhibbert@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Thanks to all that sent information and links. I will be on the road and computer-less until late Sunday and have set my account to POSTPONE.

When I get back I will compile the replies into a post for other interested parties. The SST-15 has been done before, so it can be done again...

Comments or requests for specifics should go to wb2vuo@arrl.net as I can check that account from the road if I get near a computer (library or whatever)

More to follow...

73, Wm. Keith Hibbert, WB2VU0, TC/WNY ARRL Section  
President, Brockport Amateur Radio Klub  
"My night light runs more power than my Rig!!!"

-----  
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-----  
Date: Wed, 24 Jul 2002 20:37:06 -0600 (MDT)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: Stuart Rohre <rohre@arlut.utexas.edu>  
Cc: "Karl F. Larsen" <k5di@zianet.com>,  
Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [130605] Re: The tuner character, WHEN ADJUSTED  
Message-ID: <Pine.LNX.4.44.0207242033430.11672-1000000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I now have a 88 foot wire fed in the middle with 450 ohm ribbon. I looked at the input to my tuner after tuning up for the high part of 20 meters where the beam SWR is near 3:1 and with 100 watts from my TS-50 the input of the tuner read 56 +j0.

On Wed, 24 Jul 2002, Stuart Rohre wrote:

> Karl, yes of course with two identical 50 ohm loads it will work both ways  
> without adjustment, but then in that case you did not need the transmatch to  
> start with. The more interesting case is what is the reactance seen looking  
> into the input AFTER adjustment for differing load, ie transmitter side 50  
> ohms matched, output side a multi band antenna, say a 135 foot dipole fed on  
> 20 meters. I think you said you had a similar antenna?  
> 73, Stuart K5KVH  
>  
>  
>

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

-----  
Date: Wed, 24 Jul 2002 20:41:46 -0600 (MDT)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: Trevor Jacobs <kg6cyn@earthlink.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130606] Re: FOX Goodie  
Message-ID: <Pine.LNX.4.44.0207242037570.11672-1000000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Trevor, I have a fully charged 4.5 AmpHour jellcell battery that will run my FT-817 for many days. I will be on 20 CW at 0200 UTC and before that will try the FTPack guys at 18.157.5 or down on 20 ssb if 17 meters is dead. I can get on 40 through 10 meters and also 6 meters.

So I will look for you. Sorry you could not come.

On Wed, 24 Jul 2002, Trevor Jacobs wrote:

> Boy I sure wish I could join you and the rest of the guys at Ft. Tuthill this  
> year. Would have been fun. Let us know when you are going to be on the air,



> and we'll listen for you...  
>  
> 73's Trev KG6CYN  
>  
> On Wed, 24 Jul 2002 14:33:52 -0600 (MDT) "Karl F. Larsen" <k5di@zianet.com>  
> wrote:  
>  
>  
> If the sun doesn't turn off 20 meters thursday next the chances  
> of working both Foxie from my Camp at Fort Tuthill, AZ are good. I will  
> be running a full QRP killwat to my W3FF rotating dipole up 12 feet.  
> Both Jim and Paul listen for QSL UR 559 AZ KARL 5W BT...  
>  
> I will be illuminated by a 2 mantle coleman stove with a one  
> burner backpack stove making hot coffee.  
>  
>  
  
--  
Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

-----  
Date: Wed, 24 Jul 2002 22:36:19 -0400  
From: Howard Rubin <hrubin1970@comcast.net>  
To: tracy@bytemark.com,  
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130607] RE: Suggest a core ?  
Message-ID: <NGBBIJLJALHNLHMDICMPMEJHCIAA.hrubin1970@comcast.net>  
MIME-version: 1.0  
Content-type: text/plain; charset=Windows-1252  
Content-transfer-encoding: 7BIT

Tracy,

The core will work at \*some\* frequency. You didn't mention at which frequency range you are interested. If you could find the manufacturer's data sheet for the core it will specify a useful design range, but a Google search here produced nothing. Nonetheless go ahead and build it. I've built these WB amplifiers and they work very well, but remember that they amplify passband noise as well as signal.

As a sanity check, Fair-rite magnetics [www.fair-rite.com](http://www.fair-rite.com) has data for 51, 43 and 33 material. The #51 is good for <1000 MHz, the #43 for <10 MHz and the #33 for <3 MHz. I'm not sure we are comparing apples to apples, though.

Regards, Howard-N3FEL

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of Tracy Markham  
Sent: Wednesday, July 24, 2002 2:37 PM  
To: Low Power Amateur Radio Discussion  
Subject: Suggest a core ?

I found, I think from a suggestion on this list, a great site of simple circuits. One has a 2N5109 for a nice receiver preamp. It doesn't specify the core; think something in line with a F37-43 or F50-43 would work?

<http://www.qsl.net/yo5ofh/projects/wbhoiplna.gif>

this fellow has a lot of good schematics.

Tracy N4LGH

-----  
Date: Sat, 24 Aug 2002 22:49:08 -0400  
From: "w8diz" <w8diz@fpqrp.com>  
To: <qrp-l@lehigh.edu>, <fpqrp-l@fpqrp.com>  
Subject: [130608] MP+ PLL PCB kit  
Message-ID: <00bd01c24be1\$fc27d970\$39d81b41@cinci.rr.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
                charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hi all,

I still have several kits available. We have 32 builders so far.

Check out <http://www.kitsandparts.com/kits.html>

Kit shipment should commence in about 2 weeks from now.

Cost is \$59.00 which includes shipping.

This is part of a larger project to build the mutiPIG+,  
an all band CW XCVR in the 5 watt class, high performance!!!

You can review it's predecessor here...  
<http://www.fpqrp.com/pigg20/>

It is designed to be a desktop unit (not designed for backpacking). Expect to complete the project by Xmas (2002). This is not a quickie ham kit, but a high performance transceiver that rivals the commercial rigs, AND THEN SOME! It won't have any CPU control or memory stuff, just an excellent receiver and a 5 watt transmitter.

Oh, and it includes 60 meters and 11 meters for those so inclined :-)

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio  
Clermont County - EM79uf - near Cincinnati; 39.218N - 84.305W  
SOC-8 DLQRPAG-1454 ARCI-10226 ARS-781 QRPL-1998 10X-9389 CATT-26  
FP#-1 <http://home.cinci.rr.com/w8diz> & <http://kitsandparts.com>

-----  
Date: Wed, 24 Jul 2002 20:58:44 -0600 (MDT)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: Dave Richards <wr3i@earthlink.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130609] RE: Conjugate Matching Demonstration  
Message-ID: <Pine.LNX.4.44.0207242053180.11672-1000000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Dave, a month ago I had a wire that was 136 feet long fed in the center with 450 ohm ribbon. I cut it down to 88 feet so it would load better on 40 and 30 meters. On 75 meter SSB I have not told many of what I did and I get good reports and when I'm net control everyone hears me.

The only thing I have noticed is the tuner needs to be set very accurate or you will not be tuned up. With the 136 foot wire tuning on 75 meters was smooth. With 88 feet I wrote down the settings but I can't set it well enough. I have to make power and set with care.

On Wed, 24 Jul 2002, Dave Richards wrote:

> Karl,  
> When you say your 88ft antenna works well. Compared to what?  
> Dave  
> WR3I

>  
> -----Original Message-----  
> From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of  
> Karl F. Larsen  
> Sent: Wednesday, July 24, 2002 11:26 AM  
> To: Low Power Amateur Radio Discussion  
> Subject: Conjugate Matching Demonstration

>  
>  
>  
> Yesterday I reported on a test I conducted. In this message I  
> will use numbers that are easier to use and in clear language explain  
> what happened.

>  
> The short result is that I had a transmitter making 10 watts and  
> a load that was 19 ohms in series with 910 pf, and a Tee type tuner.  
> With the load attached direct to the tuner I got 4 watts into the  
> resistor.

>  
> When I put 200 feet of coax on the output of the tuner and the  
> load at the other end, I got 6 watts of power into the resistor.

>  
> Since the coax has 0.7 DB of loss, the whole 10 watts were not  
> available at the load. But the test proves the feed line can INCREASE  
> the power into the load (antenna).

>  
> Whether this is conjugate matching I can't say. But I can say  
> that something makes my 88 foot long 80 meter dipole work well and I  
> demonstrated it.

> --

> Yours Truly,

> - Karl F. Larsen, (505) 524-3303 -

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

-----  
Date: Wed, 24 Jul 2002 21:04:31 -0600 (MDT)  
From: "Karl F. Larsen" <k5di@zianet.com>

To: "George, W5YR" <w5yr@att.net>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130610] Re: Another View of Conjugate Matching - without the math!  
(long)  
Message-ID: <Pine.LNX.4.44.0207242100560.11672-100000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Thanks George, I will print this message and take it with me to Fort  
Tuthill Hamfest. I camp out and have time to read. Also some smart guys  
are also camped out at the ScorQRPion camp.

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

-----

Date: Wed, 24 Jul 2002 21:10:18 -0600 (MDT)  
From: "Karl F. Larsen" <k5di@zianet.com>  
To: edward guilford <aa7hq@aa7hq.seanet.com>  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130611] Re: matching  
Message-ID: <Pine.LNX.4.44.0207242107250.11672-100000@Daisy.dog>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Edward, yes Terman is a classic and I used to have a set of his books  
in the Dept. A nice guy sent me a web page where I d/l the Smith chart  
and can make as many as wanted. Now I need to re-learn how to use  
it...:-)

On Wed, 24 Jul 2002, edward guilford wrote:

> those interested in antenna matching may find the material in  
> Terman's Radio Engineering Handbook(1943) of great interest.  
> Perhaps the biggest advance since then is the Smith chart.  
> Those who have troubled themselves to master this  
> find the topic very useful and straightforward. Those  
> who believe that this subject can be treated with words  
> only, no arithmetic, are probably doomed to thrash about  
> forever.  
>  
> 73 de ed, aa7hq

>  
>

--

Yours Truly,

- Karl F. Larsen, (505) 524-3303 -

-----

Date: Wed, 24 Jul 2002 22:53:13 -0500  
From: "Stuart Rohre" <rohre@arlut.utexas.edu>  
To: <aa5jj@yahoo.com>  
Cc: <qrp-l@lehigh.edu>  
Subject: [130612] 1k60 diode  
Message-ID: <017c01c2338e\$cd2cc0b0\$4e100a0a@rohredt2000>

Ham radio thrives on being able to find suitable substitutes for expensive or rare parts.  
The cross reference shows it is equal to a 1N34. Radio Shack sells those at 10 for a dollar and change. It is just a 60 volt germanium diode!  
72, Stuart K5KVH

-----

Date: Thu, 25 Jul 2002 03:57:50 +0100  
From: "TC Dufresne" <tdufresne@neb.rr.com>  
To: <qrp-l@lehigh.edu>  
Subject: [130613] Ground plane for amp  
Message-ID: <01c201c23387\$109818c0\$d3b61c41@neb.rr.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I am building an amp based on Wayne's (NB6M) specs. I am using his suggestions and building it over a two sided PCB. One side will have traces, the other will be a all-copper ground plane. I may yet do it "Manhattan style", but I would like to try it with traces.

Here is the problem: How do I etch one side and not the other? Any ideas for something to paint on or put on the ground plane side so it will not get "etched" away? I tried tape, and that is only moderately useful. Lots of streaks, generally messy, didn't like the results.  
Ideas, please?

thanks in advance,  
Tom  
KC0GXX

-----  
Date: Thu, 25 Jul 2002 00:26:24 -0500  
From: "Stuart Rohre" <rohre@arlut.utexas.edu>  
To: <w5hs@arrl.net>  
Subject: [130614] The Antenna and Low Power, (QRP) Forum of Austin ham convention  
Aug. 3 Program  
Message-ID: <01df01c2339b\$d163c7c0\$4e100a0a@rohredt2000>

The QRP Forum of Austin, TX, Summerfest, Aug. 3, features a first!

Since antennas are the key to a ham's success, and especially at QRP powers of 5 watts CW, and 10 PEP SSB, (as defined by the QRP-Amateur Radio Club International and many international QRP Clubs), this year we are planning a forum that can be called QRP and Antennas.

Leading off will be long time QRP author, past Editor of QRP-ARCI Quarterly, and internationally known QRPer, Fred Bonavita, K5QLF of San Antonio TX. Fred's byline is often found these days in the G-QRP magazine, "Sprat".

With a call like "K5QLF", (ask an old time CW operator what QLF means), you have to expect sometime different when Fred contributes to our forum. Sometimes Fred is as hard to find as Kurt N. Sterba of World Radio fame, so it is a pleasure to welcome him again as a speaker, and Fred will offer: "The lowly Doublet, or IS it?"

Once we have learned about those basic of antennas, then we have a first for any Amateur Radio forum, ANYWHERE in the world. We will learn about a new development in antennas from The University of Texas Applied Research Labs, from the inventor -Dr. Robert Rogers, KM5DR, of Austin. Bob has worked with several students on a compact antenna for HF that will pass muster with any neighborhood association, because they will not be able to see it in your yard. The house and fence will conceal it. It does this with good efficiency, and makes it possible for anyone with a patio to have a 160m antenna. The antenna has been named "The Flex" It is the Folded Helical Conical antenna. Its claim to fame is having quarterwave resonant monopole elements contained in a 0.1 wave length or smaller linear dimension. The secret to a small efficient antenna is in how you use three dimensions and maximize the antenna in a small volume. Come hear how Bob has done this. A ten meter version of this antenna underwent successful testing from ship to shore earlier this year. If they won't let you put up a tall antenna, maybe this will get you on the air.

Now if you don't have something to hook up to that antenna, our final speaker will show you how to make a radio on a budget. Ed Popp, K5BOT, of Austin, built his Novice Transmitter from parts from an old TV. He has continued building from 1955 until today. He has been in QRP since the 70's and served QRP-ARCI as both vice President and President. Ed is also a long time QRP author and will speak on "No User Serviceable Parts." Can't buy a rig? No problem, you just have to know where to look and scrounge---

And, we will have spec sheets on the new Ten Tec Argonaut V software defined radio. This rig can go down to QRP levels, or up to 20 watts output over all the HF bands. A new band can be added by downloading new programming for a PROM. Featuring DSP filtering, and built in interfacing to the new sound card digital modes such as PSK 31, this promises to be an exciting radio. We wanted to show a prototype, but they are all on the air testing for the start of production the end of August, (we hope.)

But we do have door prizes courtesy of Austin QRP Club and Glen Reid, K5FX, and they include goodies such as a BLT tuner kit, The Warbler kit, ARRL books, and G-QRP Club books. Thanks to all the fine Donors! QRPers are urged to bring their favorite project to display in the forum. AQRP will sponsor a table in the swap meet again this year.

-----  
Date: Wed, 24 Jul 2002 22:32:22 -0700  
From: "Trevor Jacobs" <kg6cyn@earthlink.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130615] Re: Anyone need these? T37-26  
Message-ID: <024501c2339c\$a89d6fc0\$fa93b2d1@tjacobs>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

The toroids are spoken for... man you gotta be fast around here ;-)

73's Trev KG6CYN  
<http://home.earthlink.net/~kg6cyn>  
<http://www.qsl.net/kg6cyn>

----- Original Message -----  
From: Trevor Jacobs <kg6cyn@earthlink.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Sent: Wednesday, July 24, 2002 6:24 PM  
Subject: Anyone need these? T37-26



> Hi Gang,  
>  
> Amidon sent me 28 pieces of T37-26 toroids by accident. I had ordered  
> the T37 with the 6 mix. They sent me the correct ones right away, and  
> don't want these back? Anyone need them? I don't even have the  
technical  
> information on the 26 mix. Let me know...  
>  
> 73's Trev KG6CYN  
> <http://home.earthlink.net/~kg6cyn>  
> <http://www.qsl.net/kg6cyn>  
>  
>

-----  
Date: Thu, 25 Jul 2002 05:38:39 +0000  
From: "Brad Hernlem" <alihernlem@hotmail.com>  
To: qrp-1@lehigh.edu  
Subject: [130616] Re: 1k60 diode  
Message-ID: <F106JLtosJ3Ih7jtrSB00007645@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Stuart Rohre (rohre@arlut.utexas.edu) sez:  
>Ham radio thrives on being able to find suitable substitutes for >expensive  
>or rare parts. The cross reference shows it is equal to a >1N34. Radio  
>Shack sells those at 10 for a dollar and change. It is >just a 60 volt  
>germanium diode!  
>72, Stuart K5KVH

Is not 60 Volt germanium diode. 1N34A is 75 volt germanium diode and 1N60  
(aka 1K60) is 40 volt germanium diode. I suspect that junction capacitance  
is also different but perhaps not important enough for application. I have  
some used 1N60s but not new.

Brad KG6IOE

-----  
Chat with friends online, try MSN Messenger: <http://messenger.msn.com>

-----  
Date: Thu, 25 Jul 2002 06:42:01 +0000  
From: "Leon Heller" <leon\_heller@hotmail.com>  
To: tdufresne@neb.rr.com, qrp-1@lehigh.edu  
Subject: [130617] Re: Ground plane for amp  
Message-ID: <F1664s7q4xpyXxYohni00021907@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

>From: "TC Dufresne" <tdufresne@neb.rr.com>  
>Reply-To: tdufresne@neb.rr.com  
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
>Subject: Ground plane for amp  
>Date: Thu, 25 Jul 2002 03:57:50 +0100  
>  
>I am building an amp based on Wayne's (NB6M) specs. I am using his  
>suggestions and building it over a two sided PCB. One side will have  
>traces,  
>the other will be a all-copper ground plane. I may yet do it "Manhattan  
>style", but I would like to try it with traces.  
>  
>Here is the problem: How do I etch one side and not the other? Any ideas  
>for  
>something to paint on or put on the ground plane side so it will not get  
>"etched" away? I tried tape, and that is only moderately useful. Lots of  
>streaks, generally messy, didn't like the results.  
>Ideas, please?  
>thanks in advance,  
>Tom  
>KC0GXX

I used to use cellulose paint sometimes. Masking tape works OK, as well, but  
some etchant does leak through. The marks can be cleaned off with abrasive.

Leon

--

Leon Heller, G1HSM Tel: +44 1327 359058 Email:leon\_heller@hotmail.com  
My web page: [http://www.geocities.com/leon\\_heller](http://www.geocities.com/leon_heller)  
My low-cost Altera Flex design kit: <http://www.leonheller.com>

-----  
Join the world s largest e-mail service with MSN Hotmail.

<http://www.hotmail.com>

-----  
Date: Thu, 25 Jul 2002 06:23:37 EDT  
From: K5BDZ@aol.com  
To: rohre@arlut.utexas.edu, qrp-1@lehigh.edu  
Subject: [130618] Re: The Antenna and Low Power, (QRP) Forum of Austin ham convention Aug. 3 Pr...  
Message-ID: <17e.b933107.2a712ba9@aol.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"  
Content-Transfer-Encoding: 7bit

In a message dated 07/25/2002 12:33:09 AM Central Daylight Time, rohre@arlut.utexas.edu writes:

> With a call like "K5QLF", (ask an old time CW operator what QLF means), you  
> have to expect sometime different when Fred contributes to our forum.  
> Sometimes Fred is as hard to find as Kurt N. Sterba of World Radio fame,

Well, guess I'll hafta try to make this one.

Fred is also a charter member of R.O.O.F. He has long espoused his famous "KISS" antenna, and this year it's rumored he will have a couple of new antennas to tout including the "SMOOCH" antenna as well as the "S.M.a.G.A." antenna.

So if Mom will get me a new pocket protector, I'll wear a new shirt and be there on.... did you say August 3rd? What time before dawn does this thing start?

Bill K5BDZ

-----  
Date: Thu, 25 Jul 2002 05:33:40 -0500  
From: Nick Kennedy <nkennedy@tcainternet.com>  
To: "'rohre@arlut.utexas.edu'" <rohre@arlut.utexas.edu>,  
Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [130619] RE: 1k60 diode & RS 1N34s  
Message-ID: <01C2339C.D55AAF00.nkennedy@tcainternet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Does RS still have these packs? I few months ago I was looking for some

1N34s or 1N34As and searched RS's on-line catalog forward and backward and didn't find any.

72--Nick, WA5BDU

-----Original Message-----

From: Stuart Rohre [SMTP:rohre@arlut.utexas.edu]  
Sent: Wednesday, July 24, 2002 10:53 PM  
To: Low Power Amateur Radio Discussion  
Subject: 1k60 diode

Ham radio thrives on being able to find suitable substitutes for expensive or rare parts.

The cross reference shows it is equal to a 1N34. Radio Shack sells those at

10 for a dollar and change. It is just a 60 volt germanium diode!

72, Stuart K5KVH

-----  
Date: Thu, 25 Jul 2002 05:37:02 -0500  
From: Nick Kennedy <nkennedy@tcainternet.com>  
To: "'tdufresne@neb.rr.com'" <tdufresne@neb.rr.com>,  
Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [130620] RE: Ground plane for amp  
Message-ID: <01C2339D.4E419C80.nkennedy@tcainternet.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

I paint the side I don't want to etch. Then after etching, put one some paint stripper--the bad paste stuff that burns your hands. You can wipe all the paint away in seconds.

72--Nick, WA5BDU

-----Original Message-----

From: TC Dufresne [SMTP:tdufresne@neb.rr.com]

Here is the problem: How do I etch one side and not the other? Any ideas for

something to paint on or put on the ground plane side so it will not get "etched" away? I tried tape, and that is only moderately useful. Lots of streaks, generally messy, didn't like the results.

Ideas, please?

thanks in advance,

Tom  
KC0GXX

-----  
Date: Thu, 25 Jul 2002 06:31:28 -0400  
From: "John Dorson" <jdorson@worldshare.net>  
To: <rattray@gpfn.sk.ca>,  
    "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130621] Re: MFJ Model 401C Econo Keyer II  
Message-ID: <002201c233c6\$75809f20\$0f0ef343@atwork>  
MIME-Version: 1.0  
Content-Type: text/plain;  
    charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Bruce just call MFJs' 800 number and they will be glad to sent one to you.

John K2JHU..

----- Original Message -----

From: "Bruce Rattray" <rattray@gpfn.sk.ca>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Wednesday, July 24, 2002 6:18 PM  
Subject: MFJ Model 401C Econo Keyer II

>  
> Picked up one of these at the Glacier hamfest flea market...works fine...  
> went to the MFJ Manual web site and no manual...can anyone send me a  
> manual via e-mail please?...or however...  
>  
> ..72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272  
> A-1 Operator Club - 10/10# 944 - QRP Borg#1 - Whiner#10 -  
> - VE5QRP SOC#11 - VE5RC SOC#12 - oo#148 - K2#2032 - COG#15 -  
> "QRP! How sweet it is!" "I am da man wit "DAH" paddle!"  
>  
>

-----  
Date: Thu, 25 Jul 2002 06:05:33 -0500  
From: Karl Kanalz <kkanalz@gcecis.com>  
To: "'Trevor Jacobs'" <kg6cyn@earthlink.net>,  
    Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130622] RE: Metric Time? Metric Weekends  
Message-ID: <01C233A2.7DA85EA0@KKANALZ>

Heavens NO, Trev! "Metric Weekends" are lonnnnnnger than "standard weekends".

You see, when you go back to work on Tuesday (having had Saturday, Sunday AND Monday "off"), that's a "metric weekend". Sort of like a meter (metere) is longer than a "standard" yard.

Karl K - W8TIF  
McKinney, Texas

-----Original Message-----

From: Trevor Jacobs [SMTP:kg6cyn@earthlink.net]  
Sent: Wednesday, July 24, 2002 7:27 PM  
To: kkanalz@gcecispc.com; Low Power Amateur Radio Discussion  
Subject: Re: Metric Time? What's Next?

Karl, are they shorter than the "Standard Weekend" ? ;-)

73's Trev KG6CYN  
<http://home.earthlink.net/~kg6cyn>  
<http://www.qsl.net/kg6cyn>

----- Original Message -----

From: Karl Kanalz <kkanalz@gcecispc.com>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Sent: Wednesday, July 24, 2002 5:18 PM  
Subject: RE: Metric Time? What's Next?

> Gosh, George.... Haven't you heard about "Metric Weekends" ?

>

> Karl K - W8TIF  
> McKinney, Texas

>

> -----Original Message-----

> From: George F Franklin [SMTP:w0av@juno.com]  
> Sent: Wednesday, July 24, 2002 6:45 PM  
> To: Low Power Amateur Radio Discussion  
> Subject: Re: Metric Time?

>

> Hi Gents,

>

> What's next?

>

> The metric hammer  
> or the metric pliers?

>

> Sorry!  
>  
> de George/W0AV  
> Etc., etc.  
>

-----  
Date: Thu, 25 Jul 2002 08:51:29 -0400  
From: David Hinerman <WD8CIV@worldnet.att.net>  
To: qrp-1@lehigh.edu  
Subject: [130623] Re: A little story...or QRP fun! (fwd)  
Message-ID: <5.1.0.14.1.20020725084911.00a747d0@ipostoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 10:15 AM 7/24/2002 -0700, you wrote:

>Just wondering if any of the rest of you have gotten negative e-mails from  
>this guy: TheseusRob@cs.com?

<snip>

>The only mail I ever sent to him was the same one I sent to the list. I think  
>this guy forgot to take his Prozac!

Trev,

I got one too, but I assumed he thought I was a spammer due to a flaky mail setup. (That happened a week or two ago, so I figured it had happened again.) I wrote him back and asked him to send me a bill, but so far no response.

Dave

-----  
"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton  
-----

Dave Hinerman  
WD8CIV@worldnet.att.net

-----  
Date: Thu, 25 Jul 2002 09:05:44 -0400

From: "Charles Mabbott" <aa8vs@msn.com>  
To: qrp-1@lehigh.edu  
Subject: [130624] RE: Metric Time?  
Message-ID: <F4spMfFVfEBkDw3b7c00001580c@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Lets go with Canadian money conversion > 1.26 ..... instead.  
I remember when my kids were little and we went to a teacher conference and the math teacher was talking about meters, decimeters, but never mention millimeters. I asked and he said that is only used by auto company and not that big a deal. Sir, your in the Detroit area and I can think of three biggies right here.... go figure....

Will be trying out antennas this Saturday morning on 10, 15, 20, etc. both SSB and CW at the Plymouth Museum in Plymouth Museum. KC8SWL so if you hear us, give us a shout to let us know we are getting out.

73 oo  
Chuck AA8VS

>From: Mighty Mik <mightymik2@attbi.com>  
>Reply-To: mightymik2@attbi.com  
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
>Subject: RE: Metric Time?  
>Date: Wed, 24 Jul 2002 14:03:32 -0700  
>  
>Blame the French. They invented metric time.  
>

"If your not part of the solution,  
there is good money to be made  
prolonging the problem."

<http://68.43.100.7:81/aa8vs>

---

MSN Photos is the easiest way to share and print your photos:  
<http://photos.msn.com/support/worldwide.aspx>

---



Date: Thu, 25 Jul 2002 09:12:45 -0400  
From: Bill Coleman <aa4lr@arrl.net>  
To: <k5di@zianet.com>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130625] Re: Feedline Test  
Message-ID: <20020725131417.FYBH1185.imf02bis.bellsouth.net@[192.168.0.20]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"

On 7/23/02 4:12 PM, Karl F. Larsen at k5di@zianet.com wrote:

>  
> The purpose of this test is to see if a semi random load impedance  
>can be loaded without large loss with a MFJ-914 4 pole network. It is  
>necessary to use a coax feed line so a common ground at the load will not  
>defeat the measurements. Tests will be made to assure the load measurement  
>does not effect the experiment.  
>  
>Equipment: 200 feet of RG-213 coax with connectors at each end; FT-817  
>radio, measured load, an oscilloscope to measure voltage across the resistor  
>(and from that compute the power to the resistor), and the Vertronics  
>VEC-584B.  
>  
>Step 1:  
>  
> Make a load that will have a SWR of 5.0 on 3.50 MHz using 50 ohm  
>feed line. I fooled around and with the Analyzer measured a 19 ohm 1 watt  
>resistor in series with a 910 pf capacitor to have a  $Z=50$  ohms and  $SWR=5.0$   
>and when I used this data in my program it said the resistor is 19.23 ohms  
>and the capacitor is 980 pf. So the load is going to be this value. A  
>picture of the load is at Fig. 1.

Um, Figure 1 appears to be missing somewhere....

>Step 2:  
>  
> Measure the power at the resistor without the tuner, with the load  
>direct connected to the radio. Equipment is radio set to 1 watt output,

Procedural question -- how can we verify the accuracy of the radio  
producing a 1 watt output? With the load impedances varying, the radio  
may actually be putting out a variety of power, depending on exactly how  
the power output is set and monitored by the equipment.

Very likely, the power setting is only modestly accurate into a 50 ohm  
resistive load.

>and

>Techtronix 422 Oscilloscope with a 10:1 cable. The scope read 4.4 blocks  
>peak-to-peak on the .2 volt/block range with a 10 to 1 probe which means it  
>read 4.4 blocks of 2 volts/block which is 8.8 volts peak-to-peak. Fig 2.

... where is that figure 2?

> This results in an RMS voltage of 4.4 volts peak/(square root of 2)  
>which is 3.1 volts rms. Power is  $V^2/R$  which is  $9.68/19 = 0.51$  watts.  
>So with a direct connected Load we get about half of the output to the  
>resistance.

Ignoring the potentially unaccounted for variables of the above power  
output, sure.

>Step 3:

>

> Put load on the tuner output and tune up for a 1:1 match to the  
>radio.

Huh? What tuner? You didn't mention a tuner before.

> This worked fine and the result is that I'm getting almost exactly  
>4.4 volts peak to peak so still getting just 0.51 watts to the resistor.  
>Re-measured and this is correct. The coax connection to the load is about 3  
>feet long of RG-58B coax. At 3.5 MHz it has very low loss. I removed the  
>scope probe and it had no effect on the tuning.

More importantly, 3 feet of RG-58 is only about 4-6 degrees of  
transmission line at 3.5 MHz.

(Is that RG-58A/U Foam or RG-58/U? The dielectric significantly alters  
the velocity factor of the coax -- another unaccounted for variable)

>Step 4:

>

> This is a sanity check. I replaced the load with a 50 ohm 2 watt  
>resistor and calculated from the measured voltage that I am getting 1.0  
>watts to this resistor.

Is this with the tuner in line, or without? (eg the conditions of Step 2  
or 3? You're not very clear here.

>Putting the 50 Ohm resistor right on the back of the  
>radio got 4.1 times 5 volts or 20.5 volts pp or 10.25 p or 7.247 Vrms and  
>that's 1.05 watts. That is what the radio is supposed to deliver in this  
>power setting. I see no measurable loss through the tuner.

1.05 watts? Didn't you start with 1 watts? Or is this 1.05 watts a more

reliable figure?

Of course, we can't account for the fact that the radio output may vary as you change the load.

>

>Step 5: I have a very long piece of RG-213, about 200 feet. I will put  
>connectors on it. Did that and have it running from the output of the tuner  
>to the load and after a slight re tune

Thought question: why did you have to re-tune?

(PS -- there are two elements to the answer)

> I read 4.8 squares each square is 2  
>volts pp or 9.6 volts pp. This is  $9.6/2=4.8$  volts peak. This is 3.394 volts  
>RMS and the power is 0.61 watts! I shorted one end and the SWR was 12.9:1.  
>This means the loss in this cable at 3.5 MHz is about 0.7 DB.

OK.

>Step 6: Put the load back on the output of the tuner without any feed line.  
>I get 4.1 squares that comes out 8.2 v-pp or 0.44 watts.

Wait a second -- what changed? You measured 0.51 watts in step three? Why the difference of .07 watts? That's an error region of almost 20%!

If you can't repeat the same results twice without a 20% error, then I would wonder seriously about your test conditions!

>Conclusions:

>

> When I ran the signal through 200 feet of RG-213 I saw an increase  
>in power into a complex load with an SWR of 5.0 compared to what I get with  
>no feed line.

Did you? How did you conclude that? You only measured the power across the resistor portion of the load. You didn't measure anything regarding the capacitor.

>It's an increase from 0.44 to 0.61 watts when the input power  
>was 1.0 watts both measured through the tuner.

Or was it 0.51 watts to 0.61 watts? Gosh, 0.61 watts is within 19% of 0.51 watts. Perhaps it's within the error region of your test conditions.

>The tuner had to be tuned

>with care, just a small mis-tuning would knock the power way down.

Isn't that a feature of the radio? (Power reduction into mis-matched loads is a common feature of modern solid-state transceivers)

> With the Load direct on the output of the radio it showed a high SWR  
>but did put 0.51 watts into the resistor. This is a measure of how well the  
>radio can feed poor loads.

Step 3 shows 0.51 watts on the resistor. Was that 0.51 watts for step 2 or step 3?

Perhaps the radio output was changing with the changing load?

> I have no idea why adding 0.7 DB of attenuation in the system  
>increased the power going into the 19 ohm resistor, but it did.

Did it? Is your conclusion that the SOLE effect of the 200 feet of RG-213 is to place 0.7 dB of attenuation into the system?

> This must be  
>some measure of the thing called conjugate matching. But I have no idea what  
>it is even reading Maxwell and others on this list.

But an expert on Maxwell, as you claim to be, should be well familiar with this phenomenon!

> The effect does get more power to the load even when it's a very poor  
>match to the characteristic impedance of the line (50 ohms).

Karl, there's a very key principle of physics that you should be aware. It's called the conservation of energy.

So, if you are to conclude that there's more power at the load than you're putting into the system, you've broken that principle. It either means you've discovered an aspect of physics that will put current theories back on the shelf for decades, or you've done something wrong.

Clearly, your conclusions speak for themselves -- you've done something wrong.

--

Now, rather than have us go back and forth over the next week, and then have you declare to the world that you alone have found "the answer", I will tell you what phenomenon you have replicated.

Pay attention. I'm only going to write this ONCE.

200 feet of RG-213 doesn't just attenuate signals by 0.7 dB. That is an important factor, for sure. However, it also ROTATES the reactive component of the load. The roughly 30 ohms of capacitive reactance changes as it moves along the coax. This would be true even if the coax were perfectly lossless.

The coax acts as an impedance transformer. You can predict the transformation on a Smith Chart. A lossless bit of coax would rotate the impedance in a circle. Because of the losses in the coax, it's actually more of a spiral, gradually converging on the  $Z_0$  of the line.

With 200 feet of coax, you don't quite have a complete turn around the circle. If you had a full wave of lossless line (or any multiple thereof) you could ignore the impedance transformation of the coax.

>From the impedance transformation of the coax ALONE, you would have expected the tuner settings to change when you inserted the coax. That's OK, though, since you'd have a conjugate match, and the impedance of your load hasn't changed. You'd expect the power to be the same, because the load is the same. But there's another factor at work -- that 0.7 dB loss.

Recall that this loss is bi-directional. It is what causes reactances on the Smith Chart to spiral toward the  $Z_0$  of the line. This phenomena is so well understood you can actually use multiple wavelengths of lossy coax as a dummy load. (Example, 100 feet of RG-174/U makes a grealy UHF dummy load -- even when not connected to anything)

Even if you had a perfect wavelength of coax, this loss is going to affect the reactance your tuner sees. Remember that your unmatched load is going to create reflections that run down the line. These reflections are going to be attenuated. So, when the reflections reach the tuner, they don't represent the original load (even with the reactance transformed by the coax), but an attenuated load -- which is closer to the  $Z_0$  of the line.

This means your tuner is matching to a conjugate condition a slightly different impedance than that necessary to produce the conjugate condition at the load. Why does the conjugate condition not hold? Because it is being masked by the attenuation of the line! The conjugate match condition holds for transmission lines with negligible loss. Because of the loss, you're not quite there.

Let's look at this carefully. We know that the reactance is in perfect conjugate balance at the tuner. But as we travel toward the load, the reactive component supplied by the tuner is attenuated. Conversely, the reactive component coming from the load is de-attenuated. So, they won't balance anymore.

So, at the load, you're actually presenting a different driving impedance from the transmitter. That impedance is going to react with the components in your load differently -- hence the different power distribution across the resistor.

There you go, Karl. No complex math, just a simple understanding of the details of impedance, transmission lines, and a bit of common sense about the conservation of energy.

Bill Coleman, AA4LR, PP-ASEL                      Mail: aa4lr@arrl.net  
Quote: "Not within a thousand years will man ever fly!"  
      -- Wilbur Wright, 1901

-----  
Date: Thu, 25 Jul 2002 06:16:24 -0700 (PDT)  
From: Lloyd Lachow <llachow@yahoo.com>  
To: w8diz <w8diz@fpqrp.com>, qrp-l@lehigh.edu, fpqrp-l@fpqrp.com  
Subject: [130626] Re: [fpqrp] MP+ PLL PCB kit  
Message-ID: <20020725131624.71209.qmail@web10002.mail.yahoo.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

Diz es Pigs,  
I've never built a damn thing, but this one looks so  
kewl, I'd be way, way pleased to participate.  
...might there be any piggies near enough to my QTH in  
MD, to hold my little trotters, should I brave an  
attempt?

oo,

=====  
Lloyd, K3ESE  
K1 # 00379 - ARRL  
ARS #1301 - FISTS #8774  
FPqrp #476 - QRParci #11147  
QRP-L #2415 - SOC #530  
HGT #6'1" - WGT #190  
BT #B-

-----  
Do You Yahoo!?  
Yahoo! Health - Feel better, live better  
<http://health.yahoo.com>

-----  
Date: Thu, 25 Jul 2002 08:07:13 -0600  
From: "Rod N0RC" <rod@n0rc.us>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130627] UPDATED Re: The " Rock-Mite" Files  
Message-ID: <004d01c233e4\$93c24e20\$6501a8c0@greyrock>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Folks,

The "Rock-Mite" files site has been updated with new links to K7Q0's and KA8MAV's Rock-Mite web contents.

The Rock-Mite files can be viewed at:

[http://www.radioactivehams.com/~n0rc/rm/the\\_Rock-Mite\\_files.html](http://www.radioactivehams.com/~n0rc/rm/the_Rock-Mite_files.html)

-or more simply-

<http://www.radioactivehams.com/~n0rc/rm/> (index file added)

Enjoy and don't forget to send me your stuff for inclusion in the "Rock-Mite" files.

73, Rod N0RC

----- Original Message -----

From: "Rod N0RC" <rod@n0rc.us>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Tuesday, July 23, 2002 7:23 AM  
Subject: The " Rock-Mite" Files

> Folks,

...

> I got to thinking it would be nice to have all this information  
> available indexed and/or filed in a central location. So I'm putting  
> together a website that will serve as a central repository for Rock-  
> Mite builders: 'the "Rock-Mite" files'. On this site I will document:

-----  
Date: Thu, 25 Jul 2002 10:13:51 -0400  
From: Bill Coleman <aa4lr@arrl.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130628] RE: Conjugate Matching Demonstration  
Message-ID: <20020725141350.UATC19755.imf22bis.bellsouth.net@[192.168.0.20]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"

On 7/24/02 10:58 PM, Karl F. Larsen at k5di@zianet.com wrote:

>The only thing I have noticed is the tuner needs to be set very  
>accurate or you will not be tuned up. With the 136 foot wire tuning on  
>75 meters was smooth. With 88 feet I wrote down the settings but I can't  
>set it well enough. I have to make power and set with care.

What kind of tuner are you using?

When I used one of the stepped-inductor tuners, I experienced this as  
well -- tricky tuning on one or more bands.

Then I bought a 2 kW roller-inductor tuner.

Since then, I can tune up anywhere on 80/75m, and easily move my  
operating frequency by merely cranking the inductor -- and not touching  
the caps. Very smooth.

The only thing better is an automatic antenna tuner.

Bill Coleman, AA4LR, PP-ASEL                      Mail: aa4lr@arrl.net  
Quote: "Not within a thousand years will man ever fly!"  
      -- Wilbur Wright, 1901

-----  
Date: Thu, 25 Jul 2002 10:18:35 -0400  
From: Bill Coleman <aa4lr@arrl.net>  
To: <k5di@zianet.com>,  
      "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130629] Re: The Answer  
Message-ID: <20020725142007.JWUR22515.imf17bis.bellsouth.net@[192.168.0.20]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"



On 7/23/02 12:31 AM, Karl F. Larsen at k5di@zianet.com wrote:

>There is still much I don't know but I'm certain I know far more  
>than you do now and it will increase with effort. All of that  
>information that was gathered 60 years ago by experts may not be so  
>good. I have no way of knowing yet.

There you go, folks. You can only believe something if it comes out of Karl's mouth. All those experts, experiments and observations are just wasted effort without Karl's explicit seal of approval....

(We'll just quietly ignore the fact that what Karl writes as absolute fact changes from moment to moment....)

Bill Coleman, AA4LR, PP-ASEL                      Mail: aa4lr@arrl.net  
Quote: "Not within a thousand years will man ever fly!"  
      -- Wilbur Wright, 1901

-----  
Date: Thu, 25 Jul 2002 10:25:44 -0400  
From: Bill Coleman <aa4lr@arrl.net>  
To: <sslyon@megalink.net>,  
      "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130630] Re: Short Dipole w/Dave Benson's Noise Generator  
Message-ID: <20020725142543.HUMM1173.imf26bis.bellsouth.net@[192.168.0.20]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"

On 7/17/02 5:19 AM, ss lyon at sslyon@megalink.net wrote:

>They go together easily in less than an hour, need no fancy  
>box and are really effective. Lots of 'em are out there right now -any cool  
>application comments from users?

I didn't buy Dave's kit, so, your mileage may vary.

I built a noise bridge from a 1991 ARRL Handbook design. I gave it a fixed 51 ohm resistance and a nulled capacitance. I even hooked it up through the transverter connector of my Kenwood TS-430S so I couldn't accidentally transmit through it.

I could not get a good null out of the bridge. It could be my toroid wasn't that great, the transceiver wasn't close to 50 ohms on receive or

perhaps I had some other problem. But it didn't work for me.

I recently used the noise generator from that project to calibrate my K2.

Bill Coleman, AA4LR, PP-ASEL            Mail: aa4lr@arrl.net  
Quote: "Not within a thousand years will man ever fly!"  
      -- Wilbur Wright, 1901

-----  
Date: Thu, 25 Jul 2002 10:41:50 -0400  
From: Bill Coleman <aa4lr@arrl.net>  
To: <k5di@zianet.com>,  
      "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130631] Re: Tuner measurements  
Message-ID: <20020725144322.LSNM1189.imf09bis.bellsouth.net@[192.168.0.20]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"

On 7/22/02 5:46 PM, Karl F. Larsen at k5di@zianet.com wrote:

>Conclusions:

>

> The radio on receive has an input impedance much like the  
>transmitter's output impedance.

>

> I'm convinced that the transmitter output impedance is 58 ohms. This  
>makes it look as if there is a conjugate match at this input to the tuner.

If the transmitter output impedance is 58 ohms, and you give it a 58 ohm load, isn't that the exact condition for "Maximum Power Transfer"? Won't that result in 50% efficiency?

Is the TS-50 drawing enough current to generate 200 watts of RF? Because if the transmitter output impedance is 58 ohms, it means that half of the RF must be dissipated in the transmitter.

With a small rig like the TS-50 dissipating 100 watts, it ought to be generating substantial amount of heat after a minute or two. Did you detect a temperature rise?

--

If you can't measure sufficient current for 200 watts of RF and/or you don't detect a temperature rise consistent with 100 watts or more of dissipation, then it is clear you don't have an output impedance of 58

ohms in the transmitter. But that doesn't mean you don't have a CM anyway, since the transmitter is designed to work into a nominally 50 ohm load.

Why is it everyone seems to have trouble distinguishing between a design load of 50 ohms, and a source impedance of 50 ohms? They aren't the same.

Bill Coleman, AA4LR, PP-ASEL                      Mail: aa4lr@arrl.net  
Quote: "Not within a thousand years will man ever fly!"  
      -- Wilbur Wright, 1901

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Date: Thu, 25 Jul 2002 10:45:36 -0400  
From: Bill Coleman <aa4lr@arrl.net>  
To: <mm1esg@compuserve.de>,  
      "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130632] Re: Tuner related losses are h u g e - some OM prefer a moderate SWR  
Message-ID: <20020725144708.UYY01211.imf08bis.bellsouth.net@[192.168.0.20]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"

On 7/6/02 10:22 AM, Chris Wagner at mm1esg@compuserve.de wrote:

>a friend made EMV measurements and stumbled across the fact that his tuner  
>cause unacceptably high losses.

How exactly did he measure the tuner losses?

>Henceforth, he recommended to opt for a SWR  
>of 3 rather than accept these losses.

This may or may not be bad. And SWR of 3 may be acceptable, provided his transmitter can load properly into it. Modern transistorised transceivers tend to reduce their power output at high SWR, so that should be considered.

> From a practical standpoint, at  
>certain parts on a vertical antenna, the SWR is astronomical, limiting the  
>a c t u a l l y   r a d i a t e d   H F.

Please explain how high SWR limits radiated RF.

>Who can corroborate the above findings? For QRPP, I wlt try avoiding

>tuner-related losses. Has someone measured the radiated HF of a  
>Rock-Mite -vs- one using NorCal's BLT or asked a buddy to report any  
>difference?

In general, a well-designed tuner, when properly adjusted, has negligible  
(ie no significant) losses.

>As a beginner, I ask forgiveness if I got it wrong. No offence meant!

Not a problem. Asking questions is how we learn.

Bill Coleman, AA4LR, PP-ASEL                      Mail: aa4lr@arrl.net  
Quote: "Not within a thousand years will man ever fly!"  
      -- Wilbur Wright, 1901

-----  
Date: Thu, 25 Jul 2002 10:43:30 -0400  
From: "Mullin, Edward J." <mulline@tycoelectronics.com>  
To: "'QRP'" <qrp-1@lehigh.edu>  
Subject: [130633] Confessions of a Rookie builder...  
Message-ID: <F1C60F6146F4DF4B902254ECAC17271D6A0504@us358mx00>  
MIME-Version: 1.0  
Content-Type: text/plain

A while ago I bought one of those nice kits from SWL, and built it, I had a  
little trouble tweaking the transmit frequency but just chalked it up to  
being unfamiliar with building etc...

SO thinking all's well and good I head off to the shack... after numerous  
attempts I can't seem to get a QSO going with anyone anywhere, (I did make  
one, rough one).

Being new to QRP and Ham Radio in general I came up with various reasons for  
my lack of success,(I even re-worked my antenna, twice!!) Well, this  
morning I opened it up and inspected the whole board, again. I'll be d\*&@#d  
if I didn't find a pad with NO solder on it!!! Seemed this was causing some  
very intermittent behavior(xmit freq. was NOT what I was tuned too...) I  
fixed the joint and now can't wait for this evening to try again!!! I  
sincerely apologize to those folks I had tried to set up a sched with, and  
anyone whom I was QRMing on 40m the past few days.

GL es 73 de KB1HYS

> Edward Mullin

>

Experience is a hard teacher, it tests you first, then provides the lesson.

-----

Date: Thu, 25 Jul 2002 10:46:29 -0400

From: Bill Coleman <aa4lr@arrl.net>

To: <hoglund@wfu.edu>,

"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [130634] Re: Vertical Confusion

Message-ID: <20020725144628.VEMB19755.imf22bis.bellsouth.net@[192.168.0.20]>

Mime-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

On 7/11/02 9:15 AM, Kenneth Hoglund at hoglund@wfu.edu wrote:

>In my specific application, if I'm using a 20m Hamstick up 1/4  
>wavelength or so, where do I place the radials??

Put them at the base of the hamstick. Within a foot or so.

Bill Coleman, AA4LR, PP-ASEL                      Mail: aa4lr@arrl.net

Quote: "Not within a thousand years will man ever fly!"

-- Wilbur Wright, 1901

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Date: Thu, 25 Jul 2002 10:52:24 -0400

From: "Paul G Kaczmarek" <Paul.G.Kaczmarek@usa.dupont.com>

To: qrp-l@lehigh.edu

Subject: [130635] 12v Battery Monitor circuit

Message-ID: <0F06451CF3.DB5A7E1F-ON85256C01.0051185B@lvs.dupont.com>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Could someone please point toward a 12v battery monitoring circuit that  
uses a  
bi-state LED as a output? (12 and up = green, 11.5 to 11.9 = yellow, below  
11.4 = red)

I had one linked and can't seem to find it. Lots of links for LM3914 to a  
10 segment LED

bargraph, I would like to keep it simple and have one LED as an output.

Thanks in advance,

Paul KB2TPA Sierra, TT Argosy Buffalo NY

-----  
Date: Thu, 25 Jul 2002 10:55:55 -0400  
From: Majority Mike Capt 609 CPS/DOXE <mike.majority@shaw.af.mil>  
To: qrp-1@lehigh.edu  
Subject: [130636] OT - Electrical House Wiring Question - Long  
Message-ID: <6547FC33FE5ED411A99900D0B784809A044B34F2@ssc-mssgxchn3.shaw.af.mil>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"

Just an OFF TOPIC question for knowledgeable parties on house wiring.

Have a GFCI breaker that keeps tripping every time the microwave "engages". The rub - the microwave is NOT on the GFCI breaker, and still runs after the breaker trips. Have at least 10 data points of the situation occurring, with no other switches being activated at the time.

What I've checked so far:

Used a polarity tester to test the correct socket wiring. All wires are corrected to the microwave socket correctly, and the test button (on the polarity tester) will not trip the GFCI from the microwave socket. The tester WILL trip the breaker from any sockets on the GFCI circuit. The TEST button on the breaker works properly.

Have used a circuit breaker locator (transmitter plugs into socket and receiver is held near the breakers to locate the correct breaker) to confirm which socket goes to which breaker. The GFCI breaker is in the upper left area of the main panel, and the microwave breaker is on the lower right (200 amp box, 40 slots).

The GFCI breaker is wired correctly, and is connected through one wire to the ground bus bar. All connections are tight.

There are no GFCI sockets near the microwave socket.

Physically checked all sockets on the GFCI circuit. Some screws needed tightening (house is 12 yrs old), fixed those.

Things to look at today:

How close the wires from each circuit (microwave and GFCI) run together in the breaker box.

Will try the microwave in a different socket to see if the breaker still trips.

Possible solutions:

The 1300w microwave (brand new) is somehow RFing the GFCI? Maybe reorient it.

Buy a Gremlin catcher.

New GFCI breaker (not till last resort, it works fine otherwise).

Thanks for any advice, please respond off-list unless you think the group would benefit (or get a laugh!).

72,  
Mike, N4VBV in Sumter, South Carolina

-----  
Date: Thu, 25 Jul 2002 11:09:49 -0400  
From: "Alverson, Tom" <TomA@xetron.com>  
To: "'mm1esg@compuserve.de'" <mm1esg@compuserve.de>,  
      "'Low Power Amateur Radio Discussion'" <qrp-l@lehigh.edu>  
Subject: [130637] RE: Tuner related losses are h u g e - some OM prefer a moderate

SWR

Message-ID: <7D72C1B2F7A3D21191F8006097149AC002EFB184@s3.xetron.com>  
MIME-Version: 1.0  
Content-Type: text/plain

There can be high losses in a tuner WHEN it is matching into a very poor swr. If the antenna is already 3:1 without the tuner, then the tuner losses in matching it to 1:1 would be minimal.

73 de Tom, NU8D

-----Original Message-----

From: Chris Wagner [mailto:mm1esg@compuserve.de]  
Sent: Saturday, July 06, 2002 10:22 AM  
To: Low Power Amateur Radio Discussion  
Subject: Tuner related losses are h u g e - some OM prefer a moderate SWR

Hi All,

a friend made EMV measurements and stumbled across the fact that his tuner

cause unacceptably high losses. Henceforth, he recommended to opt for a SWR of 3 rather than accept these losses. From a practical standpoint, at certain parts on a vertical antenna, the SWR is astronomical, limiting the actual radiated HF.

Who can corroborate the above findings? For QRPP, I wlt try avoiding tuner-related losses. Has someone measured the radiated HF of a Rock-Mite -vs- one using NorCal's BLT or asked a buddy to report any difference?

As a beginner, I ask forgiveness if I got it wrong. No offence meant!

Some reports (please direct in case this is an old hat) of the Rock-Mite would be appreciated ( i just rejoined the list). And has someone compared it to the SMK-1? Mni tn timer 72 de Chris mm1esg / kf6vci

-----  
Date: Thu, 25 Jul 2002 11:09:40 -0400  
From: "Charles Mabbott" <aa8vs@msn.com>  
To: mulline@tycoelectronics.com, qrp-1@lehigh.edu  
Subject: [130638] Re: Confessions of a Rookie builder...  
Message-ID: <F20WVRvRQ8n0lfEmBpW000245f8@hotmail.com>  
Mime-Version: 1.0  
Content-Type: text/plain; format=flowed

Ed,

"That which does not kill us or blow up rig will only make us stronger!"

Or so they say, no matter how quick you want to get a rig on the air I have found take a moment, have a coffee, take a walk, stretch and talk to family for a couple of minutes. Then take a magnifying glass and take one last look before you put the final wires [antenna] on the rig. I have caught a lot of stuff like this, but I have still missed my share.....

73 oo

Chuck AA8VS

>From: "Mullin, Edward J." <mulline@tycoelectronics.com>  
>Reply-To: mulline@tycoelectronics.com  
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
>Subject: Confessions of a Rookie builder...  
>Date: Thu, 25 Jul 2002 10:43:30 -0400

>

>A while ago I bought one of those nice kits from SWL, and built it, I had a  
>little trouble tweaking the transmit frequency but just chalked it up to  
>being unfamiliar with building etc...



"If your not part of the solution,  
there is good money to be made  
prolonging the problem."

<http://68.43.100.7:81/aa8vs>

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MSN Photos is the easiest way to share and print your photos:  
<http://photos.msn.com/support/worldwide.aspx>

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Date: Thu, 25 Jul 2002 11:30:22 -0400  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-l@lehigh.edu  
Subject: [130639] (88' doublet) RE: Conjugate Matching Demonstration  
Message-ID: <3.0.6.32.20020725113022.007af100@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>> When you say your 88ft antenna works well. Compared to what?

I gotta say, the 88 foot doublet fed with AA1MY's homebrew ladder line and up about 40 feet has been working gang busters for me up here. I've been working QRP DX with it every night since we put it up.

Just last night, worked a 9L1 on 20M phone, 5 watt pep, then a OM3 on 40 CW, 5 watts. The funny thing is, I heard the OM3 working a pileup. I tuned down a few Kc to a clear spot to peak up the tuner. Then I hear a QRZ? so I send out my call and it's the OM3 coming back!

I used to use a G5RV "shorty" up at the cabin and thought it worked well, but this "88" really shines :-) I'm sold on this piece of wire!

72,  
Steve, KD1JV  
"Melt Solder"  
White Mountains of New Hampshire  
<http://www.qsl.net/kd1jv/>

---

Date: Thu, 25 Jul 2002 08:51:18 -0700  
From: "Tracy Markham" <tracy@bytemark.com>  
To: "QRP-L" <qrp-l@lehigh.edu>, <tdufresne@neb.rr.com>  
Subject: [130640] RE: Ground plane for amp  
Message-ID: <GNE0LGDJDOPEALHJMKLCCEFGCHAA.tracy@bytemark.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I use a piece of contact paper or shipping tape if the board is small. Tape the entire side, and make sure the corners are pressed down well.

Tape is easier to clean off than paint ...

Tracy N4LGH

-----Original Message-----

From: owner-qrp-l@Lehigh.EDU [mailto:owner-qrp-l@Lehigh.EDU] On Behalf Of TC Dufresne  
Sent: Wednesday, July 24, 2002 7:58 PM  
To: Low Power Amateur Radio Discussion  
Subject: Ground plane for amp

I am building an amp based on Wayne's (NB6M) specs. I am using his suggestions and building it over a two sided PCB. One side will have traces, the other will be a all-copper ground plane. I may yet do it "Manhattan style", but I would like to try it with traces.

Here is the problem: How do I etch one side and not the other? Any ideas for something to paint on or put on the ground plane side so it will not get "etched" away? I tried tape, and that is only moderately useful. Lots of streaks, generally messy, didn't like the results.

Ideas, please?

thanks in advance,

Tom

KC0GXX

-----  
Date: Thu, 25 Jul 2002 11:59:58 -0400  
From: "w8diz" <w8diz@fpqrp.com>  
To: <Paul.G.Kaczmarek@usa.dupont.com>,  
        "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130641] Re: 12v Battery Monitor circuit  
Message-ID: <009701c233f4\$54247f30\$0200000a@hunkar.com>

MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Paul,

I have a little circuit that displays ONE of THREE voltage ranges.  
Look at this schematic: <http://www.kitsandparts.com/pll3.gif>  
The LM358 and it's associated components is the circuit of interest.  
This circuit turns on DS2 when the input voltage at R18 is less  
than 5.1 volts. DS1 is ON when the voltage is between 5.1 and 9.0  
And when the voltage goes over 9.0, DS3 turns ON.  
Only ONE LED is on at a time. All you need to do is change the  
voltage references at pins 3 and 5 for use as a battery indicator.

Hope this helps

-Diz, W8DIZ

72 & "oo's" - Dieter (DIZ) Gentzow - W8DIZ - Loveland, Ohio  
Clermont County near Cincinnati; EM79uf; 39.218N - 84.305W  
<http://home.cinci.rr.com/w8diz> & <http://kitsandparts.com>  
----- Original Message -----  
From: "Paul G Kaczmarek" <Paul.G.Kaczmarek@usa.dupont.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Thursday, July 25, 2002 10:52 AM  
Subject: 12v Battery Monitor circuit

Could someone please point toward a 12v battery monitoring circuit that  
uses a  
bi-state LED as a output? (12 and up = green, 11.5 to 11.9 = yellow, below  
11.4 = red)  
I had one linked and can't seem to find it. Lots of links for LM3914 to a  
10 segment LED  
bargraph, I would like to keep it simple and have one LED as an output.

Thanks in advance,

Paul KB2TPA Sierra, TT Argosy Buffalo NY

-----  
Date: Thu, 25 Jul 2002 12:03:18 -0400

From: "Lee Mairs" <lmairs@cox.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130642] Re: Confessions of a Rookie builder...  
Message-ID: <011801c233f4\$cacd8aa0\$6401a8c0@boomer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Don't get discouraged. Dave Benson will talk you through getting it fixed.  
I've been building stuff for 35 years, and I am still shocked when something  
works the first time.  
73 de Lee  
KM4YY

----- Original Message -----

From: "Charles Mabbott" <aa8vs@msn.com>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Thursday, July 25, 2002 11:09 AM  
Subject: Re: Confessions of a Rookie builder...

> Ed,  
> "That which does not kill us or blow up rig will only make us stronger!"  
>  
> Or so they say, no matter how quick you want to get a rig on the air I  
have  
> found take a moment, have a coffee, take a walk, stretch and talk to  
family  
> for a couple of minutes. Then take a magnifying glass and take one last  
> look before you put the final wires [antenna] on the rig. I have caught a  
> lot of stuff like this, but I have still missed my share.....  
> 73 oo  
> Chuck AA8VS  
>  
>  
>  
>  
> >From: "Mullin, Edward J." <mulline@tycoelectronics.com>  
> >Reply-To: mulline@tycoelectronics.com  
> >To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
> >Subject: Confessions of a Rookie builder...  
> >Date: Thu, 25 Jul 2002 10:43:30 -0400  
> >  
> >A while ago I bought one of those nice kits from SWL, and built it, I had  
a

> >little trouble tweaking the transmit frequency but just chalked it up to  
> >being unfamiliar with building etc...  
>  
>  
>  
> "If your not part of the solution,  
> there is good money to be made  
> prolonging the problem."  
>  
>  
> <http://68.43.100.7:81/aa8vs>  
>  
>  
> -----  
> MSN Photos is the easiest way to share and print your photos:  
> <http://photos.msn.com/support/worldwide.aspx>  
>  
>

-----  
Date: Thu, 25 Jul 2002 12:08:27 -0400  
From: "Joe Roof" <jroof@mindspring.com>  
To: <qrp-l@lehigh.edu>  
Subject: [130643] Re: 12v Battery Monitor circuit  
Message-ID: <000301c233f5\$836f2aa0\$6401a8c0@joes>

Paul,  
You might want to look at the North Georgia QRP Club PiG (Power Indicator Guard) It doesn't do everything you want, but does indicate a low battery voltage. Plus Over Voltage, Over Current and Reverse Polarity Protection. You can see it at <http://www.nogaqrp.org/> click on Club Projects then NoGaPiG. It's also available as a kit. (details on the site) Maybe you could adapt the circuit to your needs.  
72  
Joe, w4jhr

-----  
Date: Thu, 25 Jul 2002 09:08:49 -0700 (PDT)  
From: Bob <ad4mz@yahoo.com>  
To: qrp-l@lehigh.edu  
Cc: ad4mz@yahoo.com

Subject: [130644] ARS BB#66 Ready  
Message-ID: <20020725160849.43606.qmail@web11202.mail.yahoo.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii

BB # 66 is going to summit Skyuka Mt, near Tryon, NC for the Flight of the Bumblebees on Jul28. Plan to focus on 20m using my Elecraft K1 and dipole ant. Hope to fill my log with lots of fellow qrp callsigns. My 5th year of max qrp fun.

Bob

AD4MZ

-----  
Do You Yahoo!?  
Yahoo! Health - Feel better, live better  
<http://health.yahoo.com>

-----  
Date: Thu, 25 Jul 2002 12:09:21 -0400  
From: "Mullin, Edward J." <mulline@tycoelectronics.com>  
To: "'QRP'" <qrp-l@lehigh.edu>  
Subject: [130645] RE: (88' doublet) RE: Conjugate Matching Demonstration  
Message-ID: <F1C60F6146F4DF4B902254ECAC17271D6A0505@us358mx00>  
MIME-Version: 1.0  
Content-Type: text/plain

I am also using an 88ft doublet fed with 300 ohm twin lead, it works well, considered one end is awkwardly bent around the tree that supports it. W4RNL has a page on this specific antenna type and recommends it for 80-20mtr use. I have tried it on 160 as a toploaded vertical by tying the twinlead feeds together, this works ok too, well I can get a 1.5:1 VSWR on it anyway. I haven't tried it on anything higher than 20 yet, although I think the only problem with the higher bands would be the number of lobes developed in the pattern.  
a link for those who are interested in some hard data:  
<http://www.cebik.com/88.html>

73

> -----Original Message-----  
> From: Steven Weber [SMTP:kd1jv@moose.ncia.net]  
> Sent: Thursday, July 25, 2002 11:30 AM  
> To: Low Power Amateur Radio Discussion  
> Subject: (88' doublet) RE: Conjugate Matching Demonstration  
>

> >> When you say your 88ft antenna works well. Compared to what?  
>  
> I gotta say, the 88 foot doublet fed with AA1MY's homebrew ladder line and  
> up about 40 feet has been working gang busters for me up here. I've been  
> working QRP DX with it every night since we put it up.  
>  
> Just last night, worked a 9L1 on 20M phone, 5 watt pep, then a OM3 on 40  
> CW, 5 watts. The funny thing is, I heard the OM3 working a pileup. I  
> tuned  
> down a few Kc to a clear spot to peak up the tuner. Then I hear a QRZ? so  
> I  
> send out my call and it's the OM3 coming back!  
>  
> I used to use a G5RV "shorty" up at the cabin and thought it worked well,  
> but this "88" really shines :-) I'm sold on this piece of wire!  
>  
> 72,  
> Steve, KD1JV  
> "Melt Solder"  
> White Mountains of New Hampshire  
> <http://www.qsl.net/kd1jv/>

-----  
Date: Thu, 25 Jul 2002 11:30:10 -0500  
From: "Donald Dorn" <DDORN@cwis.net>  
To: "LOW POWER RADIO DISCUSSION" <QRP-L@lehigh.edu>  
Subject: [130646] 2SC1969 TRANSISTORS  
Message-ID: <001001c233f8\$8cd0df00\$3569a5d0@computer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Anybody know who is selling the 2SC 1969 now? Mouser no longer lists them  
and instead is selling the NTE equivalent at more than ten bucks each.  
73,  
Don K5AAR

-----  
Date: Thu, 25 Jul 2002 09:36:45 -0700  
From: "Bob Tellefsen" <n6wg@earthlink.net>  
To: <qrp-l@lehigh.edu>  
Subject: [130647] Re: Ground plane for amp  
Message-ID: <MABBJOEABOILMKCJCLFCIEHCDHAA.n6wg@earthlink.net>  
MIME-Version: 1.0

Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Tom  
Try a coating of rubber cement.  
You can rub it off when you are done.  
73, Bob N6WG

-----  
Date: Thu, 25 Jul 2002 12:47:52 -0400  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: Paul.G.Kaczmarek@usa.dupont.com  
Cc: qrp-l@lehigh.edu  
Subject: [130648] Re: 12v Battery Monitor circuit  
Message-ID: <3.0.6.32.20020725124752.007b1870@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>Could someone please point toward a 12v battery monitoring circuit that  
>uses a  
>bi-state LED as a output? (12 and up = green, 11.5 to 11.9 = yellow, below  
>11.4 = red)

Paul,

The problem would be easier to solve if you didn't require the yellow state, but it looks like it could be done with three sections of a quad op amp and a voltage referenece. I could use something like this for the up coming BB event this weekend. I've got one more VCR to fix before my work for the day is done, then I'll wire up this circuit I just drew and see if it works. If it does, I'll post it on my web site latter.

72,  
Steve, KD1JV  
"Melt Solder"  
White Mountains of New Hampshire  
<http://www.qsl.net/kd1jv/>

-----  
Date: Thu, 25 Jul 2002 16:37:10 GMT  
From: na5n@zianet.com  
To: mulline@tycoelectronics.com  
Cc: qrp-l@lehigh.edu  
Subject: [130649] Re: Confessions of a Rookie builder...



Message-ID: <20020725163711.3977.qmail@zianet.com>  
Mime-version: 1.0  
Content-type: text/plain; charset="us-ascii"

Mullin, Edward J. writes:

> Being new to QRP and Ham Radio in general I came up with various reasons  
> for my lack of success, ...

> I'll be d\*&@#d if I didn't find a pad with NO solder on it!!!

Edward, and others,

You have nothing to feel bad about. Even when you do this stuff for a living, like many of us, you will make the same mistakes, over and over. It just happens, no matter how careful you are. So as you continue building electronic gear, expect the following to happen:

1. NO solder on a pad.
2. Too MUCH solder on a pad.
3. Solder splash, shorting out a trace or two.
4. Soldering a component into the wrong place.
5. Soldering in an IC "upside down" (my particular favorite!)
6. Circuit doesn't work - you forgot to plug it in or turn it on.
7. Diode in the wrong ways.
8. Misreading those little color bands or microscopic lettering on components (particularly true for those over 45)
9. Winding a toroid a turn or two off
10. Circuit doesn't work due to a true failure in a brand new component (known in industry as "infant mortality" - it happens).

Not to mention failure to obtain a conjugate match!!!

Anyone can slob a bunch of solder on a board to build something. The real skill is troubleshooting it to get it to work. You found your mistake and corrected it. That's the part to be proud of. You'll always learn more electronics from fixing it than from building it. Good job.

72, Paul NA5N

-----  
Date: Thu, 25 Jul 2002 09:47:14 -0700  
From: "Bob Tellefsen" <n6wg@earthlink.net>  
To: <qrp-1@lehigh.edu>

Subject: [130650] QRP HomeBuilder web site  
Message-ID: <MABBJOEABOILMKCJCLFCMEHCDHAA.n6wg@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

A while back someone else asked what had become of this site, but I never saw a reply.

Does anyone know if it is still around, maybe with a different address? The present URL is busted.

I believe the site was run by VE7BP0.

73, Bob N6WG

-----  
Date: Thu, 25 Jul 2002 09:53:50 -0700  
From: Conrad Weiss <radman@best.com>  
To: "'Donald Dorn'" <DDORN@cwis.net>,  
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130651] RE: 2SC1969 TRANSISTORS  
Message-ID: <01C233C1.2E626420@209-162-48-185.thegrid.net>

Don,

Thomas Distributing lists the 2SC1969 at: \$4.90 ea - tho' I haven't contacted them to confirm stock. Here's the URL:

<http://www.nimhbattery.com/transistors1.htm>

GL,

Conrad Weiss  
NN6CW

-----  
From: Donald Dorn[SMTP:DDORN@cwis.net]  
Sent: Thursday, July 25, 2002 9:30 AM  
To: Low Power Amateur Radio Discussion  
Subject: 2SC1969 TRANSISTORS

Anybody know who is selling the 2SC 1969 now? Mouser no longer lists them and instead is selling the NTE equivalent at more than ten bucks each.

73,

Don K5AAR

-----  
Date: Thu, 25 Jul 2002 12:57:10 -0400  
From: "John J. McDonough" <wb8rcr@arrl.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Cc: <DDORN@cwis.net>  
Subject: [130652] Re: 2SC1969 TRANSISTORS  
Message-ID: <010301c233fc\$56b3e300\$010044c0@chartermi.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I think RF Parts has them, but if I recall, they're not cheap.

72/73 de WB8RCR <http://www.qsl.net/wb8rcr>  
didileydadidah QRP-L #1446 Code Warriors #35

----- Original Message -----  
From: "Donald Dorn" <DDORN@cwis.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Sent: Thursday, July 25, 2002 12:30 PM  
Subject: 2SC1969 TRANSISTORS

> Anybody know who is selling the 2SC 1969 now? Mouser no longer lists them  
> and instead is selling the NTE equivalent at more than ten bucks each.  
> 73,  
> Don K5AAR  
>

-----  
Date: Thu, 25 Jul 2002 12:58:07 -0400  
From: "Lee Mairs" <lmairs@cox.net>  
To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130653] Re: Confessions of a Rookie builder...  
Message-ID: <016001c233fc\$73870980\$6401a8c0@boomer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

> ... 10. Circuit doesn't work due to a true failure in a brand new

component

> (known in industry as "infant mortality" - it happens).

>

> Not to mention failure to obtain a conjugate match!!!

>

That last one can get really expensive, especially if she has a good lawyer...

73 de Lee

km4yy

-----  
Date: Thu, 25 Jul 2002 19:19:47 +0200

From: "Juanjo Pastor" <ec5aca@wanadoo.es>

To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [130654] CQ East Coast again!

Message-ID: <000f01c233ff\$9cfe8c40\$5533243e@fer>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

Hello again,

I (hopefully) will be on 14.060 and neighbourhood at 22:00 or so this Friday the 16th with my TT1320 at 3 Watts and the 3 element triband yagi beam of the radioclub in Liria, near Valencia. Hope to hear some of you. CUL on the air!

73, 72 de Juanjo, EA5CHQ-EC5ACA. EA-QRP #104, G-QRP #9742, QRP-L #1662.

Juanjo Pastor

C/San Roque, 4-1=BA

46460 Silla

SPAIN

e-mail: ea5chq@wanadoo.es

Tel.: +034 96 120 17 67

Movil: 651 35 35 11

-----

Date: Thu, 25 Jul 2002 11:19:12 -0600 (CST)  
From: Bruce Rattray <rattray@gpfn.sk.ca>  
To: Low Power Group <qrp-l@lehigh.edu>  
Subject: [130655] can't find  
Message-ID: <Pine.LNX.4.33.0207251116350.21881-100000@neale.gpfn.sk.ca>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I've been scouring the web for Brian Kassel's, K7RE, program QRPDUPE...what I thought would be an easy search has turned up nothing...anyone have a good url for this program please?....I'm assuming he has a program on there for the BumbleBee event?....thank you...

..72/73 - Bruce (VE5RC+VE5QRP) QRP-C#1 QRP-L#886 ARCI#9683 Zombie#272  
A-1 Operator Club - 10/10# 944 - QRP Borg#1 - Whiner#10 -  
- VE5QRP SOC#11 - VE5RC SOC#12 - oo#148 - K2#2032 - COG#15 -  
"QRP! How sweet it is!" "I am da man wit "DAH" paddle!"

-----

Date: Thu, 25 Jul 2002 13:21:37 -0400  
From: "Mullin, Edward J." <mulline@tycoelectronics.com>  
To: "'QRP'" <qrp-l@lehigh.edu>  
Subject: [130656] RE: Confessions of a Rookie builder...  
Message-ID: <F1C60F6146F4DF4B902254ECAC17271D6A0506@us358mx00>  
MIME-Version: 1.0  
Content-Type: text/plain

Actually Dave has been really helpful to me... he must have a LOT of patients:)

> -----Original Message-----  
> From: Lee Mairs [SMTP:lmairs@cox.net]  
> Sent: Thursday, July 25, 2002 12:03 PM  
> To: Low Power Amateur Radio Discussion  
> Subject: Re: Confessions of a Rookie builder...  
>  
> Don't get discouraged. Dave Benson will talk you through getting it  
> fixed.  
> I've been building stuff for 35 years, and I am still shocked when  
> something  
> works the first time.  
> 73 de Lee  
> KM4YY

>  
>  
>  
> ----- Original Message -----  
> From: "Charles Mabbott" <aa8vs@msn.com>  
> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
> Sent: Thursday, July 25, 2002 11:09 AM  
> Subject: Re: Confessions of a Rookie builder...  
>  
>  
> > Ed,  
> > "That which does not kill us or blow up rig will only make us stronger!"  
> >  
> > Or so they say, no matter how quick you want to get a rig on the air I  
> > have  
> > found take a moment, have a coffee, take a walk, stretch and talk to  
> > family  
> > for a couple of minutes. Then take a magnifying glass and take one last  
> > look before you put the final wires [antenna] on the rig. I have caught  
> > a  
> > lot of stuff like this, but I have still missed my share.....  
> > 73 oo  
> > Chuck AA8VS  
> >  
> >  
> >  
> >  
> > >From: "Mullin, Edward J." <mulline@tycoelectronics.com>  
> > >Reply-To: mulline@tycoelectronics.com  
> > >To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
> > >Subject: Confessions of a Rookie builder...  
> > >Date: Thu, 25 Jul 2002 10:43:30 -0400  
> > >  
> > >A while ago I bought one of those nice kits from SWL, and built it, I  
> > had  
> > a  
> > >little trouble tweaking the transmit frequency but just chalked it up  
> > to  
> > >being unfamiliar with building etc...  
> >  
> >  
> >  
> > "If your not part of the solution,  
> > there is good money to be made  
> > prolonging the problem."  
> >  
> >  
> > > http://68.43.100.7:81/aa8vs

> >  
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> >  
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> >  
> >  
> >  
> >  
> >  
> >  
> >  
> >

-----  
Date: Thu, 25 Jul 2002 10:26:08 -0700  
From: Marv Fagenson <k6hcj@juno.com>  
To: qrp-1@lehigh.edu  
Subject: [130657] Ten Tec 208 CW Filter  
Message-ID: <20020725.102611.-441439.0.k6hcj@juno.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7bit

Want to buy/trade: Ten Tec 208 CW filter for my Argo 509.  
Please respond to email address w/ condition/price.

Marv Fagenson  
k6hcj@Juno.com

-----  
GET INTERNET ACCESS FROM JUNO!  
Juno offers FREE or PREMIUM Internet access for less!  
Join Juno today! For your FREE software, visit:  
<http://dl.www.juno.com/get/web/>.

-----  
Date: Thu, 25 Jul 2002 10:51:57 -0700  
From: Conrad Weiss <radman@best.com>  
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>,  
    '"Bruce Rattray'" <rattray@gpfn.sk.ca>  
Subject: [130658] RE: can't find (QRP Dupe... found)  
Message-ID: <01C233C9.4CEDEF60@209-162-48-185.thegrid.net>

Bruce,

Try this URL to download QRP Dupe v4.5 Beta:

URL: <http://members.mato.com/bkassel/>

Have fun,

Conrad Weiss  
NN6CW

-----  
From: Bruce Rattray[SMTP:rattray@gpfn.sk.ca]  
Sent: Thursday, July 25, 2002 4:19 AM  
To: Low Power Amateur Radio Discussion  
Subject: can't find

I've been scouring the web for Brian Kassel's, K7RE, program QRPDUPE...what I thought would be an easy search has turned up nothing...anyone have a good url for this program please?....I'm assuming he has a program on there for the BumbleBee event?....thank you...

..72/73 - Bruce (VE5RC+VE5QRP)

-----  
Date: Thu, 25 Jul 2002 14:02:35 -0400  
From: David Hinerman <WD8CIV@worldnet.att.net>  
To: qrp-l@lehigh.edu  
Subject: [130659] Re: Metric Time? What's Next?  
Message-ID: <5.1.0.14.1.20020725135856.00a766c0@ipostoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Trev,

Hardly. On the TV series "Taxi," in one episode one of the characters - a burnout named Reverend Jim (played by Christopher Lloyd) - came in to work. The rest of the cabbies were surprised to see him, since he'd been missing for days. When they asked where he'd been and if he was all right, he seemed to be surprised:

"I just went out of town for the weekend."  
"But you were gone 9 days!"  
"Oh... I though we'd switched to the metric system."

So a "metric weekend" is quite a bit longer than the Standard Weekend.

Dave

At 05:26 PM 7/24/2002 -0700, you wrote:



>Karl, are they shorter than the "Standard Weekend" ? ;-)

>

>73's Trev KG6CYN

><http://home.earthlink.net/~kg6cyn>

><http://www.qsl.net/kg6cyn>

>

>----- Original Message -----

>From: Karl Kanalz <kkanalz@gcecispc.com>

>To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

>Sent: Wednesday, July 24, 2002 5:18 PM

>Subject: RE: Metric Time? What's Next?

>

>

> > Gosh, George.... Haven't you heard about "Metric Weekends" ?

> >

> > Karl K - W8TIF

> > McKinney, Texas

> >

> > -----Original Message-----

> > From: George F Franklin [SMTP:w0av@juno.com]

> > Sent: Wednesday, July 24, 2002 6:45 PM

> > To: Low Power Amateur Radio Discussion

> > Subject: Re: Metric Time?

> >

> > Hi Gents,

> >

> > What's next?

> >

> > The metric hammer

> > or the metric pliers?

> >

> > Sorry!

> >

> > de George/W0AV

> > Etc., etc.

> >

-----  
"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton  
-----

Dave Hinerman

WD8CIV@worldnet.att.net

-----

Date: Thu, 25 Jul 2002 11:14:34 -0700  
From: Conrad Weiss <radman@best.com>  
To: "'Paul G Kaczmarek'" <Paul.G.Kaczmarek@usa.dupont.com>,  
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130660] RE: 12v Battery Monitor circuit  
Message-ID: <01C233CC.75A09B80@209-162-48-185.thegrid.net>

Paul,

Hmmmmmm, best I can do is a reference to a very simple LM-3914 circuit w/ 3 LEDs (G, A, R) - suitable for monitoring gel/SLA batt voltage. This gas gauge can be built for 6v, 9v, or 12v applications by swapping the values of four resistors.

Component count: 1 chip, 1 diode, 4 resistors, 3 LEDs - not bad.

This circuit was, at one time, produced as a kit by a Canadian enterprise called, Rationally Applied Design Technologies. They no longer market the kit, 'tho they left the board artwork, component values, etc on their web page - nice guys :)!

The schemo is no longer there, however you can easily draw the circuit from the board art. On the plus side, it's small and dirt cheap to build :)!

Here's the URL:

<http://home.cc.umanitoba.ca/~burchil/RAD/GasGauge.6.9.12.v.html>

Could you let us know if you find the "tri-color", single LED circuit...?

GL es 73,

Conrad Weiss  
NN6CW

-----  
From: Paul G Kaczmarek[SMTP:Paul.G.Kaczmarek@usa.dupont.com]  
Sent: Thursday, July 25, 2002 7:52 AM  
To: Low Power Amateur Radio Discussion  
Subject: 12v Battery Monitor circuit

Could someone please point toward a 12v battery monitoring circuit that uses a bi-state LED as a output? (12 and up = green, 11.5 to 11.9 = yellow, below 11.4 = red) I had one linked and can't seem to find it. Lots of links for LM3914 to a 10 segment LED bargraph, I would like to keep it simple and have one LED as an output.

Thanks in advance,

Paul KB2TPA Sierra, TT Argosy Buffalo NY

-----  
Date: Thu, 25 Jul 2002 11:50:42 -0700  
From: Jeff Dairiki <dairiki@dairiki.org>  
To: Paul.G.Kaczmarek@usa.dupont.com  
Cc: qrp-1@lehigh.edu  
Subject: [130661] Re: 12v Battery Monitor circuit  
Message-ID: <20020725115042.5fd02ef3.dairiki@dairiki.org>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=US-ASCII  
Content-Transfer-Encoding: 7bit

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> circuit that uses a bi-state LED as a output?  
> (12 and up = green, 11.5 to 11.9 = yellow, below  
> 11.4 = red)

Perhaps it's overkill, but this could be easily  
done with a PIC (or other type of) microcontroller.

Using a PIC opens up all possibilities for all kinds  
of enhancements. Of the top of the head:

- o alarm based (in part) on  $dV/dt$  rather than just V.
- o load sensing
- o charge control

73 de Jeff, KI6MO

-----  
Date: Thu, 25 Jul 2002 19:06:08 -0000  
From: tf3vst@vortex.is (Villi Idunni)  
To: <dairiki@dairiki.org>,  
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130662] RE: 12v Battery Monitor circuit  
Message-ID: <MABBIDGOOGFJFPNLPCNDOEKBDHAA.tf3vst@vortex.is>  
MIME-Version: 1.0  
Content-Type: text/plain;

charset="iso-8859-1"  
Content-Transfer-Encoding: 8bit

This is sooo easy to to - you only need one LM3914 IC, 4 resistors and up to 10 leds

OM G3RJV included this in his neat 6 pack kit, a drawing should be on the GQRP club's web site.

I did build this circuit and it is FB!

72, de Villi TF3VS

-----Original Message-----

From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of Jeff Dairiki

Sent: 25. j 1 2002 18:51

To: Low Power Amateur Radio Discussion

Subject: Re: 12v Battery Monitor circuit

> Could someone please point toward a 12v battery monitoring  
> circuit that uses a bi-state LED as a output?  
> (12 and up = green, 11.5 to 11.9 = yellow, below  
> 11.4 = red)

Perhaps it's overkill, but this could be easily done with a PIC (or other type of) microcontroller.

Using a PIC opens up all possibilities for all kinds of enhancements. Of the top of the head:

- o alarm based (in part) on dV/dt rather than just V.
- o load sensing
- o charge control

73 de Jeff, KI6MO

-----  
Date: Thu, 25 Jul 2002 15:05:06 -0400 (EDT)  
From: Thom LaCosta <baltimoremd@baltimoremd.com>  
To: Juanjo Pastor <ec5aca@wanadoo.es>  
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>  
Subject: [130663] Re: CQ East Coast again!

Message-ID: <20020725145316.Y19125-1000000@unix1.vhost.min.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 25 Jul 2002, Juanjo Pastor wrote:

> Hello again,  
>  
> I (hopefully) will be on 14.060 and neighbourhood at 22:00 or so  
> this Friday the 16th with my TT1320 at 3 Watts and the 3 element  
> triband yagi beam of the radioclub in Liria, near Valencia. Hope to  
> hear some of you. CUL on the air!

I would listen for you Friday the 26, but it looks like you wanted us  
to meet you last week???

73

Thom

baltimoremd@baltimoremd.com  
<http://www.baltimoremd.com/>  
<http://www.baltimorehon.com/>  
<http://www.zerobeat.net>

Thom LaCosta K3HRN Webmaster  
Baltimore's Home Page  
Home of the Baltimore Lexicon  
Home of The QRP Web Ring  
and Drake Mail List Pages

-----  
Date: Thu, 25 Jul 2002 14:18:01 -0500  
From: "Donald Dorn" <DDORN@cwis.net>  
To: <DDORN@cwis.net>,  
"Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>  
Subject: [130664] Re: 2SC1969 TRANSISTORS  
Message-ID: <000f01c23410\$00139680\$2169a5d0@computer>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Thanks to all for pointing me in the right direction to buy these  
transistors. The best deal I've seen yet is from RF Parts; package of 5 for  
\$12.25. That's cheaper than they were at Mouser last time.

73,  
Don K5AAR

-----

Date: Thu, 25 Jul 2002 15:23:33 -0400  
From: "Mike Yetsko" <myetsko@insydesw.com>  
To: <mike.majority@shaw.af.mil>,  
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130665] Re: OT - Electrical House Wiring Question - Long  
Message-ID: <007b01c23410\$c525b8e0\$0300a8c0@charter.net>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

You probably have some kind of loop you aren't aware of.

First off, open the panel and make SURE the wiring is snug for all the circuits.

Then make sure the GFI circuit is snug again.

Finally, trace out the GFI circuit and look for something plugged in (or wiring!) that could tie the neutral to the ground.

A lot of GFI circuits work by putting both the hot and the neutral wire through a torroid, wired out of phase with each other. As long as the current in both lines match, then the 'sense' winding on the torroid doesn't detect anything. When they are out of match, then the sense winding generates a voltage that is amplified and triggers the device.

Mike

----- Original Message -----

From: "Majority Mike Capt 609 CPS/DOXE" <mike.majority@shaw.af.mil>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Thursday, July 25, 2002 10:55 AM  
Subject: OT - Electrical House Wiring Question - Long

> Just an OFF TOPIC question for knowledgeable parties on house wiring.  
>  
> Have a GFCI breaker that keeps tripping every time the microwave  
> "engages". The rub - the microwave is NOT on the GFCI breaker, and still  
> runs after the breaker trips. Have at least 10 data points of the  
situation  
> occurring, with no other switches being activated at the time.  
>  
> What I've checked so far:  
>

> Used a polarity tester to test the correct socket wiring. All wires are  
> corrected to the microwave socket correctly, and the test button (on the  
> polarity tester) will not trip the GFCI from the microwave socket. The  
> tester WILL trip the breaker from any sockets on the GFCI circuit. The  
TEST  
> button on the breaker works properly.  
>  
> Have used a circuit breaker locator (transmitter plugs into socket  
and  
> receiver is held near the breakers to locate the correct breaker) to  
confirm  
> which socket goes to which breaker. The GFCI breaker is in the upper  
left  
> area of the main panel, and the microwave breaker is on the lower right  
(200  
> amp box, 40 slots).  
>  
> The GFCI breaker is wired correctly, and is connected through one wire  
to  
> the ground bus bar. All connections are tight.  
>  
> There are no GFCI sockets near the microwave socket.  
>  
> Physically checked all sockets on the GFCI circuit. Some screws needed  
> tightening (house is 12 yrs old), fixed those.  
>  
> Things to look at today:  
> How close the wires from each circuit (microwave and GFCI) run  
together in  
> the breaker box.  
>  
> Will try the microwave in a different socket to see if the breaker  
still  
> trips.  
>  
> Possible solutions:  
>  
> The 1300w microwave (brand new) is somehow RFing the GFCI? Maybe  
reorient  
> it.  
>  
> Buy a Gremlin catcher.  
>  
> New GFCI breaker (not till last resort, it works fine otherwise).  
>  
> Thanks for any advice, please respond off-list unless you think the  
group

> would benefit (or get a laugh!).  
>  
> 72,  
> Mike, N4VBV in Sumter, South Carolina  
>

-----  
Date: Thu, 25 Jul 2002 14:48:17 -0500  
From: "Stuart Rohre" <rohre@arlut.utexas.edu>  
To: "Lew Paceley" <lew@paceley.com>, <AQR@yahoogroups.com>,  
"Ed Manuel \N5EM\" <n5em@amsat.org>,  
Subject: [130666] Austin QRP Convention Fri. Aug. 2 Dinner and Door Prize  
gathering  
Message-ID: <005f01c23414\$38d441a0\$4e100a0a@rohredt2000>

Hello all, As in previous years, we have reserved the Lone Star Cafe back  
room in Lincoln Village, across IH 35 from the Red Lion Hotel. (west of  
it).

As before, after we take a quick turn through the swap meet Friday night,  
let us meet at the Registration Tables of hamfest at 7 PM or be at the  
restaurant by 7:30 PM. This is a no host affair, (you pay). Someone bring  
a camera, all bring a good appetite. (Glen bring some door prizes, and  
others will be at the forum between speakers).

This restaurant is typically quieter than others in the area, prices are OK,  
and a wide variety of food is served. I think the group really liked the  
desserts a couple years back! Lone Star is best reached by leaving the  
Hotel on the 290 west bound access road, going under IH 35, and turning up  
Middle Fiskville Road. There is an entry to Lincoln Center right at Lone  
Star Cafe. Lone Star will be on the west side of Lincoln Center, on your  
right as you drive up Middle Fiskville Rd.

72, Stuart K5KVH

-----  
Date: Thu, 25 Jul 2002 15:47:48 -0400  
From: ken cubilo electric <kce@chartermi.net>  
To: qrp-l@lehigh.edu  
Subject: [130667] Re: OT - Electrical House Wiring Question - Long  
Message-ID: <3D4055E4.5FA34443@chartermi.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii



Content-Transfer-Encoding: 7bit

what is the brand of the gfci breaker? try relocating the gfci breaker up one space in the electrical panel, other than that start looking for a loose connection on one of the neutral wires, i would start with the entrance lugs in the electrical panel. Good luck on this one I just love to get one of these service calls its like looking for a needle in a haystack. One other thing if that brand of breaker happens to be cutler hammer you have just joined the same club that hundreds belong to in the new electronic age.

73 ken w8ob

Mike Yetsko wrote:

>

> You probably have some kind of loop you aren't aware of.

>

> First off, open the panel and make SURE the wiring is snug for all  
> the circuits.

>

> Then make sure the GFI circuit is snug again.

>

> Finally, trace out the GFI circuit and look for something plugged in  
> (or wiring!) that could tie the neutral to the ground.

>

> A lot of GFI circuits work by putting both the hot and the neutral wire  
> through a torroid, wired out of phase with each other. As long as the  
> current in both lines match, then the 'sense' winding on the torroid  
> doesn't

> detect anything. When they are out of match, then the sense winding  
> generates a voltage that is amplified and triggers the device.

>

> Mike

>

> ----- Original Message -----

> From: "Majority Mike Capt 609 CPS/DOXE" <mike.majority@shaw.af.mil>

> To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

> Sent: Thursday, July 25, 2002 10:55 AM

> Subject: OT - Electrical House Wiring Question - Long

>

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> >

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> > button on the breaker works properly.  
> >  
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> >  
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> > Physically checked all sockets on the GFCI circuit. Some screws needed  
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> >  
> > 72,  
> > Mike, N4VBV in Sumter, South Carolina  
> >

-----  
Date: Thu, 25 Jul 2002 19:53:27 +0100  
From: Chuck Adams <k7qo@earthlink.net>  
To: qrp-l@lehigh.edu  
Subject: [130668] Tuesday Night 7/23/02 Report de K7Q0/QRPP  
Message-ID: <5.1.0.14.0.20020725194610.00a03d90@mail.earthlink.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

Gang,

Got on about 0230UTC and worked until 0600UTC  
when 7.042MHz was not in use and it was in use a lot.  
Some SSB QRM late in the session.

Sorry to report that I didn't work one station, but will try again tonight.  
There were thunderboomers most of the evening but none close enough  
to cause any more arcing in the antenna coupler/conjugate matching  
system. :-)

1. I did get to improve my sending skills as there were a little rusty.
2. The receiver in the little rig is hot even for a DC rcvr with 2 ICs.  
It should work pretty well on 30 meters but don't know about 20 meters.
3. With the Vibroplex Code Warrior paddle and a 0.8Ahr gel-cell the  
rig is going into a "Shack-in-a-Box" setup for travel with a small  
dipole or the W6MMA PW-1 vertical. I'll take it to Oceanside, CA  
on Wednesday for the next week by the sea shore.

So listen around 7.042MHz after 0300UTC tonight and you might hear  
just a whisper of a signal from north-central AZ.

FYI,

Sorry I didn't report yesterday but I was in Phoenix all day.

Again, Dave will start shipping as soon as he gets crystals for 7.040MHz.

Chuck Adams, K7QO CP-60 k7qo@earthlink.net  
<http://www.qsl.net/k7qo>

Moving to Arizona? --- Bring your own water, please.

-----  
Date: Thu, 25 Jul 2002 15:03:14 -0500  
From: Dave Hottell <hottell@gulftel.com>  
To: wr3i@earthlink.net,  
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130669] RE: 88' wire - Conjugate Matching Demonstration  
Message-ID: <3.0.6.32.20020725150314.008f5500@pop.gulftel.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 07:22 PM 7/24/02 -0400, Dave Richards wrote:

>Karl,  
> When you say your 88ft antenna works well. Compared to what?  
>Dave  
>WR3I

Hi Dave and all,

Sounds like your post has generated a marketing effort!! You know: Works Great! Less filling! 1/3 less impedance than your regular antenna!!

How about we talk reality for a few minutes? An 88' wire is a random length of wire and it behaves like any other random length of wire. Once it is sufficiently above its resonant frequency it will exhibit what is commonly referred to as "gain", but could equally be called "loss". The fields generated by the various currents flowing in the different parts of the antenna combine in various ways such that in some directions they are in-phase, and in other directions they are out-of-phase. So in some directions we have fields that are stronger than that of a resonant dipole, and in other directions the fields are weaker. Hence we have both 'gain' and 'loss'. The amount of energy 'gained' is equal to the amount of energy 'lost'.

If, for example, we look at an EZNEC model of an 88' wire, up 40 ft., on 20m, we see that (if we assign one end of the wire a heading of zero degrees) at 90 deg. we have about 9.5 dBi of 'gain'. (All the gain figures I quote are at 15 deg. elev.) This is all well and good if we happen to want to work a station in that direction, or if we can rotate our wire to

make a station we want to work appear at 90 deg.

Is this a panacea? Is this great? Well, that depends. Because along with the 9 dB of gain at 90 deg. we also have 9 dB of gain at 270 deg. If the QRM is coming from 270 deg. then we did not improve our S/N ratio, and we are no better off than with an ordinary dipole.

In addition, at 55 deg. we have a 'gain' of about -12.5 dBi. That is really great! And off the ends of the wire the 'gain' is about -6 dBi. After all, the additional energy going in the 90 deg. direction has to come from somewhere.

To those who say this antenna is 'great', let me ask you a couple of questions:

If someone lives on a small lot that is oriented E-W (such that they can only put up an E-W wire) and they want to work Europe, is the 88' wire a 'great' antenna for them?

What if this ham wants to work South America, is the 88' wire a 'great' antenna then?

The answer in both cases is, of course, No, the 88' wire is far from 'great' for these folks. The notch at 55 deg is nearly in line with the desired directions.

So I think what we have is a few folks who happen, either through good knowledge or happenstance, to have put up an 88' wire such that it has its gain in the direction they want to work. Nothing wrong with that at all. But let us be realistic, not everyone will be able to duplicate these results. In some cases the 88' wire is definitely NOT the antenna of choice.

There is nothing magical about 88' of wire. At some frequency *\*every\** piece of wire exhibits exactly the same characteristics.

An antenna needs to be designed to fit the job at hand. Making vague, general, and unsubstantiated claims about some random length of wire serves no purpose, and may do harm.

And making claims such as "I worked Ru on 100 mW SSB and he gave me a 59" is also meaningless. All that means is that the propagation was exceptional during that time. The 'gain' due to propagation makes the 'gain' of any antenna paltry by comparison.

Now, if you had said "I have a set of stacked, rotatable, 5 element Yagi's at 30', 60', 90', and 120' and this is a great antenna", then I would be inclined to agree with that assertion.

73,  
Dave  
ab9ca/4

>  
>-----Original Message-----  
>From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU]On Behalf Of  
>Karl F. Larsen  
>Sent: Wednesday, July 24, 2002 11:26 AM  
>To: Low Power Amateur Radio Discussion  
>Subject: Conjugate Matching Demonstration  
>  
>  
>  
> Yesterday I reported on a test I conducted. In this meesage I  
>will use numbers that are easier to use and in clear language explain  
>what happened.  
>  
> The short result is that I had a transmitter making 10 watts and  
>a load that was 19 ohms in series with 910 pf, and a Tee type tuner.  
>With the load attached direct to the tuner I got 4 watts into the  
>resister.  
>  
> When I put 200 feet of coax on the output of the tuner and the  
>load at the other end, I got 6 watts of power into the resistor.  
>  
> Since the coax has 0.7 DB of loss, the whole 10 watts were not  
>available at the load. But the test proves the feed line can INCREASE  
>the power into the load (antenna).  
>  
> Whether this is conjugate matching I can't say. But I can say  
>that something makes my 88 foot long 80 meter dipole work well and I  
>demonstated it.  
>  
>--  
>Yours Truly,  
>  
> - Karl F. Larsen, (505) 524-3303 -  
>  
>  
>

-----  
Date: Thu, 25 Jul 2002 16:52:30 -0400

From: Bill Coleman <aa4lr@arrl.net>  
To: <kd1jv@moose.ncia.net>, "QRP" <qrp-1@lehigh.edu>  
Subject: [130670] Re: (88' doublet) RE: Conjugate Matching Demonstration  
Message-ID: <20020725205401.EUIW11646.imf07bis.bellsouth.net@[192.168.0.20]>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="US-ASCII"

On 7/25/02 11:30 AM, Steven Weber at kd1jv@moose.ncia.net wrote:

>I used to use a G5RV "shorty" up at the cabin and thought it worked well,  
>but this "88" really shines :-) I'm sold on this piece of wire!

What's the height of the G5RV? What's the terrain like?

Whether 88 or 102 or 125 feet, these untuned doublets won't be noticeably different on 80m. The important dimension in this case isn't the length, but the height above ground in wavelengths. That will have the biggest effect.

Good DX on 80m with an antenna at 40 ft isn't bad.

Bill Coleman, AA4LR, PP-ASEL                      Mail: aa4lr@arrl.net  
Quote: "Not within a thousand years will man ever fly!"  
      -- Wilbur Wright, 1901

-----  
Date: Thu, 25 Jul 2002 16:59:30 -0400  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: Paul.G.Kaczmarek@usa.dupont.com  
Cc: qrp-1@lehigh.edu  
Subject: [130671] Re: 12v Battery Monitor circuit  
Message-ID: <3.0.6.32.20020725165930.007a22d0@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Okay, I came up with a simple battery monitoring circuit, which meets Pauls spec's, more or less.

It came out a lot simpler than I had though at first. I took a run to Radio Shack to buy a bi-color LED and found it was two diodes in one package, with a common cathode. So, the circuit ended up just needing a single dual op amp and a voltage reference (78L05) Basicly, when the voltage is above 11.9V, just the green led is on. Below 11.9 volts, the red led turns on, giving a yellowish color. Below 11.5 volts, the green led turns off and

only the red led is on.

Here's the link to the web page:

<http://www.qsl.net/kd1jv/batmon.HTM>

72,  
Steve, KD1JV  
"Melt Solder"  
White Mountains of New Hampshire  
<http://www.qsl.net/kd1jv/>

-----  
Date: Thu, 25 Jul 2002 21:06:10 GMT  
From: rsstone@juno.com  
To: qrp-1@lehigh.edu  
Subject: [130672] Advice on Operating from Jamaica  
Message-ID: <20020725.170621.2371.98106@webmail6.nyc.unttd.com>

Hi - I'm having some difficulty getting information about requirements for operating in Jamaica. The link on the ARRL site isn't working. Can someone tell me what the procedure is for obtaining permission and/or necessary licensing, what to expect from customs when bringing gear in, etc.? Has anyone done this lately? Thanks for your help.

72,  
  
Ron (KA3J)  
Bethesda, MD

-----  
GET INTERNET ACCESS FROM JUNO!  
Juno offers FREE or PREMIUM Internet access for less!  
Join Juno today! For your FREE software, visit:  
<http://dl.www.juno.com/get/web/>.  
-----

Date: Thu, 25 Jul 2002 14:36:27 -0700  
From: Conrad Weiss <radman@best.com>  
To: "'Steven Weber'" <kd1jv@moose.ncia.net>,  
Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>



Subject: [130673] RE: 12v Battery Monitor circuit  
Message-ID: <01C233E8.A9AB4BC0@209-162-48-185.thegrid.net>

Steve,

Nicely done! Two questions:

1.) What is the "worst case" current draw of this circuit? I'm presuming it occurs when the LED is in the "YELLOW" condition? Seems to me that a fuel gauge should be a *\*very\** efficient device; lest we're constantly burning down the battery just to know its voltage status :)!

2) If "Melt Solder" started w/ a fresh sheet of paper... how would *\*he\** design the ultimate battery gauge? :) I wonder what that might look like...?

Best,

Conrad Weiss  
NN6CW

-----  
From: Steven Weber[SMTP:kd1jv@moose.ncia.net]  
Sent: Thursday, July 25, 2002 2:00 PM  
To: Low Power Amateur Radio Discussion  
Subject: Re: 12v Battery Monitor circuit

Okay, I came up with a simple battery monitoring circuit, which meets Pauls spec's, more or less.

It came out a lot simpler than I had though at first. I took a run to Radio Shack to buy a bi-color LED and found it was two diodes in one package, with a common cathode. So, the circuit ended up just needing a single dual op amp and a voltage reference (78L05) Basicly, when the voltage is above 11.9V, just the green led is on. Below 11.9 volts, the red led turns on, giving a yellowish color. Below 11.5 volts, the green led turns off and only the red led is on.

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<http://www.qsl.net/kd1jv/batmon.HTM>

72,  
Steve, KD1JV  
"Melt Solder"  
White Mountains of New Hampshire  
<http://www.qsl.net/kd1jv/>

-----  
Date: Thu, 25 Jul 2002 14:35:12 -0700  
From: "Bill Jones" <kd7s@psnw.com>  
To: <kd1jv@moose.ncia.net>,  
      "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>  
Subject: [130674] Re: 12v Battery Monitor circuit  
Message-ID: <000901c23423\$29c0b4f0\$9110010a@fresno>  
MIME-Version: 1.0  
Content-Type: text/plain;  
              charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Very interesting Steve .... and many thanks for sharing your design. What's the story behind R7?

=====  
Bill Jones - <><  
Sanger, California  
=====

----- Original Message -----  
From: "Steven Weber" <kd1jv@moose.ncia.net>  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Sent: Thursday, July 25, 2002 13:59 PM  
Subject: Re: 12v Battery Monitor circuit

> Okay, I came up with a simple battery monitoring circuit, which meets Pauls  
> spec's, more or less.

-----  
Date: Thu, 25 Jul 2002 17:48:00 -0400  
From: Daryl WB4YEX <darylcline@ntelos.net>  
To: qrp-1@lehigh.edu  
Subject: [130675] Operating QRP on WV/VA line  
Message-ID: <4.3.2.7.0.20020725174745.00b6a0f0@mail.ntelos.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

I will be camping this weekend on the WV/VA line. The line will be running right down the middle of my camper. Anyone who needs WV or VA for WAS or Pendelton County WV or Rockingham County Va. for county hunters I will be

on the air at 1900 eastern Friday and Saturday Evenings and 1100 eastern  
Sat. Morning and periodically at other times throughout the weekend. I  
will be calling CQ FP  
7.060 14.060 QRP CW only

-----  
Date: Thu, 25 Jul 2002 15:09:31 -0700  
From: Conrad Weiss <radman@best.com>  
To: "'Bill Jones'" <kd7s@psnw.com>,  
Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130676] RE: 12v Battery Monitor circuit  
Message-ID: <01C233ED.47E8CCA0@209-162-48-185.thegrid.net>

Bill,

Looks like Steve needed 62k and didn't have it in the bin - time to lump a  
couple together, eh? ;) (Does look a little asymmetrical tho'...?) Hmmm,  
might as well knock out R7 and change the value of R2 to clean it up if  
that's the case....

Elsewhere, I believe I'd go with a better reference than the common 7805,  
and knock out both trimmers - replacing them w/ precision fixed resistors >  
as Steve mentions in his design notes on the web page. Seems cleaner...

Best,

Conrad  
NN6CW

-----  
From: Bill Jones[SMTP:kd7s@psnw.com]  
Sent: Thursday, July 25, 2002 2:35 PM  
To: Low Power Amateur Radio Discussion  
Subject: Re: 12v Battery Monitor circuit

Very interesting Steve .... and many thanks for sharing your design.

What's  
the story behind R7?

=====  
Bill Jones - <><  
Sanger, California

-----

Date: Thu, 25 Jul 2002 15:26:52 -0700  
From: "johngabbard" <johngabbard@usintouch.com>  
To: <qrp-1@lehigh.edu>  
Subject: [130677] C21 FS  
Message-ID: <00e301c2342a\$60b30150\$f4811c0c@juanita>  
MIME-Version: 1.0  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

I have a nice TenTec Century 21 digital for sale at \$200. plus shipping USA  
works great thanks john KF70M

-----  
Date: Thu, 25 Jul 2002 18:11:08 -0400  
From: David Hinerman <WD8CIV@worldnet.att.net>  
To: qrp-1@lehigh.edu  
Subject: [130678] Re: 2SC1969 TRANSISTORS  
Message-ID: <5.1.0.14.1.20020725180735.00b18f58@postoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 11:30 AM 7/25/2002 -0500, you wrote:  
>Anybody know who is selling the 2SC 1969 now? Mouser no longer lists them  
>and instead is selling the NTE equivalent at more than ten bucks each.

Don,

I just got some from [electronix.com](http://electronix.com) - they sell them for \$3.79 each. This  
place sells a lot of consumer electronics parts - CB, satellite TV, etc. I  
believe the 'C1969 is a CB final.

They have a \$15 minimum, but that buys a lot of transistors.

Dave

-----  
"You can fool some of the people all of the time. That's enough to make a  
living." - Lance Burton  
-----

Dave Hinerman  
WD8CIV@att.net  
-----

Date: Thu, 25 Jul 2002 18:19:49 -0400  
From: David Hinerman <WD8CIV@worldnet.att.net>  
To: qrp-l@lehigh.edu  
Subject: [130679] Re: Ground plane for amp  
Message-ID: <5.1.0.14.1.20020725181531.00b35fe0@postoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 03:57 AM 7/25/2002 +0100, you wrote:

>Here is the problem: How do I etch one side and not the other? Any ideas for  
>something to paint on or put on the ground plane side so it will not get  
>"etched" away? I tried tape, and that is only moderately useful. Lots of  
>streaks, generally messy, didn't like the results.

Tom,

I use nail polish. For boards, I mean. (Grin) It covers large areas and  
cleans off easily with acetone or nail polish remover.

Also sometimes I use the wide plastic tape sold for sealing boxes for  
shipment. It's about as wide as duct tape, but it's a plastic film. You can  
expect a bit of etchant creeping under the edges depending on the adhesive,  
though.

Dave

-----  
"You can fool some of the people all of the time. That's enough to make a  
living." - Lance Burton  
-----

Dave Hinerman  
WD8CIV@att.net

-----  
Date: Thu, 25 Jul 2002 18:27:17 -0400  
From: David Hinerman <WD8CIV@worldnet.att.net>  
To: qrp-l@lehigh.edu  
Subject: [130680] RE: Metric Time?  
Message-ID: <5.1.0.14.1.20020725182044.00b3b7f0@postoffice.worldnet.att.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 07:59 PM 7/24/2002 -0400, you wrote:

>Well I do know that in order to convert pliers to Metric you first have to  
>use Multi-Pliers!

A friend of mine used to sell tools at Sears. A guy came in one day asking for a metric Crescent wrench. My friend, thinking it was a gag, asked why he needed it. The guy had an imported car with metric hardware, but the only Crescent wrench he owned was a 6 inch one, which he showed to my friend. Right there on the handle it said "6 inch."

My friend told him to stop and think about it for a minute. The guy did, then realized what he was doing and left.

Dave

-----  
"You can fool some of the people all of the time. That's enough to make a living." - Lance Burton  
-----

Dave Hinerman  
WD8CIV@att.net

-----  
Date: Thu, 25 Jul 2002 17:22:25 -0500  
From: Don <dwittlic@apci.net>  
To: mulline@tycoelectronics.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>  
Subject: [130681] Re: Confessions of a Rookie builder...  
Message-ID: <3D407A21.B86DC59A@APCI.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Ed and Group,

The "no solder" joint would be just another variety of construction error, except it looks so obviously wrong. That is, once you actually look at it.

We have to be sure that we have looked or inspected in the first place. Easy to do? Yes, if we follow a procedure. The key is to record, and therefore, know that you have inspected each joint for correctness.

An orderly procedure can make this task more accurate and

actually faster  
because you will not be inspecting the same areas multiple  
times. Here is a  
procedure that has worked for me. Use a pictorial drawing  
of the solder side of  
the printed ckt board and color in the joints as you verify  
them. Pencil in one  
hand, marking the pictorial, pointer in the other hand to  
keep your place on the  
board. Once your paper has all the joints colored red, then  
you have a record  
that you looked at all of them. If your kit did not provide  
such a drawing, you  
could put your new circuit board on the photocopy machine or  
scanner to make a  
pictorial for checking purposes. No, I don't know the  
copyright implications of  
making a check sheet.

Yes, I have left joints unsoldered, but since I have been  
using a check sheet I  
caught them before energizing the circuit.

Here is an interesting coincidence. Of three used kits (two  
audio filters and a  
Q-Multiplier) that I found with no-solder joints, all 3 had  
the incomplete joint  
on the rear apron of the chassis. One was on a jack, two  
were on terminal  
strips. All were nicely crimped but not soldered.

Good luck with your projects,  
Don WN9V

"Mullin, Edward J." wrote:

>  
> A while ago I bought one of those nice kits from SWL, and built it, I had a  
> little trouble tweaking the transmit frequency but just chalked it up to  
> being unfamiliar with building etc...  
>  
> SO thinking all's well and good I head off to the shack... after numerous  
> attempts I can't seem to get a QSO going with anyone anywhere, (I did make  
> one, rough one).  
>  
> Being new to QRP and Ham Radio in general I came up with various reasons for  
> my lack of success, (I even re-worked my antenna, twice!!) Well, this  
> morning I opened it up and inspected the whole board, again. I'll be d\*&@#d  
> if I didn't find a pad with NO solder on it!!! Seemed this was causing some

> very intermittent behavior(xmit freq. was NOT what I was tuned too...) I  
> fixed the joint and now can't wait for this evening to try again!!! I  
> sincerely apologize to those folks I had tried to set up a sched with, and  
> anyone whom I was QRMing on 40m the past few days.  
>  
> GL es 73 de KB1HYS  
>  
> > Edward Mullin  
> >  
> Experience is a hard teacher, it tests you first, then provides the lesson.

-----  
Date: Thu, 25 Jul 2002 18:52:21 -0400  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: radman@best.com  
Cc: qrp-1@lehigh.edu  
Subject: [130682] RE: 12v Battery Monitor circuit  
Message-ID: <3.0.6.32.20020725185221.007a4260@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>  
> Nicely done! Two questions:  
>  
Thanks!

> 1.) What is the "worst case" current draw of this circuit? I'm presuming  
> it occurs when the LED is in the "YELLOW" condition? Seems to me t

Current is fairly significant, most of it going into the leds of course. 12 ma with one led lit and 20 ma with both on for yellow. That can be trimmed down some by increasing the value of the 1K resistors in series with the leds, but then it gets harder to see. I'd probably hook it up in series with a NO momentary push button, and just use it occasionally to see how we're holding up.

> 2) If "Melt Solder" started w/ a fresh sheet of paper... how would \*he\*  
> design the ultimate battery gauge? :) I wonder what that might look  
> like...?

I think I'd use one of the little 8 pin Atmel cpus with built in 10 bit A/D. Make the trip points programmable, so you can optimise it for the kind of battery your using. The LED's could be PWM to save power. Could be set up to "wake up" every so often and give an indication, or come on when it hits a trip point as an alarm. Maybe sound a beeper when the battery gets real low. Quite a few possiblilties once you give it some smarts...



72,  
Steve, KD1JV  
"Melt Solder"  
White Mountains of New Hampshire  
<http://www.qsl.net/kd1jv/>

-----  
Date: Thu, 25 Jul 2002 18:54:59 -0400  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: "Bill Jones" <kd7s@psnw.com>  
Cc: qrp-l@lehigh.edu  
Subject: [130683] Re: 12v Battery Monitor circuit  
Message-ID: <3.0.6.32.20020725185459.007a65a0@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

>Very interesting Steve .... and many thanks for sharing your design. What's  
>the story behind R7?

Well, the optimum value for R1 calculated out to 13K or thereabouts. Since  
that's not a real common value, R7 (47K) was added across R1 (15K) to put  
it in the proper range.

72,  
Steve, KD1JV  
"Melt Solder"  
White Mountains of New Hampshire  
<http://www.qsl.net/kd1jv/>

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End of QRP-L Digest 2627

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